

THE PHILOSOPHY
OF WORDS

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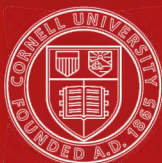
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THE
PHILOSOPHY OF WORDS.

A POPULAR INTRODUCTION TO THE
SCIENCE OF LANGUAGE

BY
FREDERIC GARLANDA, PH.D.

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F. GARLANDA.

Rac

The more we analyze language, the more clearly we see that it transcends in depth the most conscious productions of the mind.

SCHELLING.

I believe truly that languages are the best mirror of the mind, and that an exact analysis of the signification of words would make us better acquainted than any thing else with the operations of the understanding.

LEIBNITZ.

He who would examine the influence which words, mere words, have exercised on the minds of men, might write a history of the world that would teach us more than any which we yet possess.

MAX MÜLLER.

As the fossils of the rocks disclose to the palæontologist the various forms of life that have successively appeared upon the globe, so, too, the fossils of speech disclose to the scientific philologist the various stages that have been reached in the growth of human consciousness.

A. H. SAYCE.

Language is the reflection of the thoughts and beliefs of communities from their earliest days ; and by tracing its changes and its fortunes, by discovering the origin and history of words and their meanings, we can read those thoughts and beliefs with greater certainty and minuteness than had they been traced by the pen of the historian.

A. H. SAYCE.

Etymology tends directly to aid us in the clear understanding and just and forcible employment of the words which compose our own language.

GEORGE P. MARSH.

Etymology has the charm of all sciences which deal with the beginning and growth of the great products of nature or mind.

GEORGE CURTIUS.

PREFACE.

IT is the aim of this work to explain as plainly as possible some of the most important results of the Science of Language.

It is astonishing how little is generally known, even by educated people, about language,—what it is, whence our words come, what is their true bearing, how is our language connected with those spoken by peoples around us, etc. We seem to speak too much as birds sing—without ever bending our minds to reflect on the nature of the sounds we utter.

The main results of geology, physiology, chemistry and other sciences are already a possession of the public at large. Why should we not pay some attention also to this wonderful instrument, without which civilization, society itself, could not be possible? An inquiry into the nature of our language can

not be less interesting, hardly less important, than the study of the constitution of the earth, or of our body.

A work on this subject which aims to be popular, is necessarily imperfect and incomplete. Many things are to be left out ; technical terms must be avoided as much as possible ; rigorous scientific order can not generally be followed ; too often concision must be given up and repetitions resorted to for the sake of plainness and clearness. It is also, of course, impossible not to use now and then instances, comparisons and explanations already given by others, especially in such standard works as those of Prof. Whitney and Max Müller.

All suggestions which may help to make this work more useful and less incomplete, will meet with thankful acknowledgment.

F. G.

New York, January, 1886.

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THE PHILOSOPHY OF WORDS.

I.

INTRODUCTION.

IT is a common saying that wonder is the child of ignorance. There is some truth in these words, when they are applied to the unreasonable wondering of slow or prejudiced minds, which every thing just out of the beaten tracks of every day life is enough to startle. But if we speak of that wonder which is worthy of a thoughtful mind, we may call it rather the child of knowledge. Every progress in life, every new discovery, teaches us that the more we know, the more we find to wonder at. Science increases the world of wonders not less than the world of knowledge, and seems to add wings to our imagination as well as strength to our reason.

Indeed, even the roughest shepherd who looks at the dawn brightening in the east, or at evening, while driving his flock home, stops to contemplate the sky ablaze with the glow of the setting sun, and the sailor who watches from the deck the great vault of heaven and its countless stars mirrored in the water around him, can not but be moved by the greatness of such scenes. Yet their admiration, great as it is, can not even be compared with that of the student of astronomy, who knows what those stars are, and how many thousands of millions of miles their light has traveled to reach us; who knows that nearly every one of those countless sparkling points is the centre of a separate solar system, each system as great and wonderful as that in which we live.

Moreover, the scholar brings his meditations to bear upon fields full of wonders unspeakably great, the importance, often even the existence, of which is entirely unknown to the uneducated. There are millions of men, for instance, who live and die without ever asking themselves a question about this wonderful system of sounds by which we communi-

cate with our fellow beings. Yet, what is there in the world more suggestive of thought and worthier of meditation than "Language"? Whence comes this simple yet mysterious music, by means of which we lay open, so to speak, our minds to our fellow men, and read in their minds in turn? How is it made? or is it made at all? We speak of living languages and dead languages; but how does a language come to life? how does it perish? Where are the magic forces to give birth to such a marvelous child, and where is the giant strong enough to destroy it?

The growth of herbs and trees and flowers is wonderful indeed, with so many families differing from region to region, from climate to climate. But see what happens with language: there is an endless growth of words and sounds, all over the world, differing not only according to climates and regions, but often from village to village. How does this happen? What does it mean that, if you travel all over the world, though you may not know the names of all the trees and flowers you see, still their forms and colors strike you not less, and some-

times even more, than they do the natives ; but if you overstep the boundaries of your own nation, and go to a play, or listen to a speech, in a foreign language, you see people laughing, applauding or weeping at words which for you are entirely meaningless? If it is true that we are all brothers, how is it that, in Europe for instance, a few hours' travel takes you among people whom you understand no more than you would the Polynesians or the Chinese?

And again, how are words formed? What connection is there between our ideas and our words, that, when we utter certain sounds, we are sure that those who listen to us understand exactly what we mean ; and by those sounds we actually lay our minds bare before our listeners? And how is it that an Arab, a Chinese, in order to convey the same idea, uses quite different sounds, and is equally sure to be understood by his audience?

It is hardly possible, I think, to find in the whole range of human life problems more interesting than these which are suggested even by a superficial consideration of what "language" is.

Still, if we look at ourselves and people around us, we may safely assert that no natural or social phenomenon receives so little consideration on the part of the large majority of men. So few pay attention to these facts that, if you ask a hundred persons what a "word" is, ninety-nine will not be able to give a satisfactory answer. Only a few days ago I happened to read in a grammar that "words consist of sounds and letters." That sounds are to be considered as constituents of "words," is true, but letters have no more to do with the constitution of words than the colors of a landscape painter with the existence of the land itself. Of course we may represent with letters, that is we may *write* words, just as we can paint trees and flowers; but words exist without letters, as flowers and trees exist without painters. Many tribes have no writing; still, they have words.

But we must not wonder at the little consideration language (not this or that language, but language in itself, or the nature of language), has received and still receives from most men. It is so intimately connected with our own being

that it requires no little power of reflection to bring our thoughts to bear upon it. It grows with our own consciousness, and we are no more aware of the growth of our language than we are aware of the growth of our brain.

Every now and then one finds people, otherwise cultivated but lacking special linguistic training, who are ready to put forth theories about words and languages, and find special delight in hunting out what they call etymologies. But their theories and would-be etymologies are in the main nothing but wild vagaries and fancies, utterly apart from scientific reasoning and facts. They do just as men did when, in the absence of any astronomical lore, looking at the daily appearing and disappearing of the sun, and eager to have some reason for this phenomenon, they imagined that the sun was going to or rising from his bed. And we must remember that centuries elapsed before mankind ceased to be satisfied with this explanation.

But however childish such explanations, however wild and fanciful such etymologies, we must not laugh at them. In those puerile

attempts we have the origin of two great sciences: astronomy and the science of language. They show us the human mind busy, asking: "Why this? whence? wherefore?" The answer is wrong, but at the same time a great step is made; instead of merely gazing in mute bewilderment at the phenomena of the sky, instead of wondering in helpless stupor at the mysteries of language, men begin to ask, "Why?" and thus to recognize by implication that a why there must be, and it must be found out. This is the beginning of all scientific research, and all intellectual progress. There is, however, this difference, that a knowledge of the laws of the heavens was attained comparatively early in the history of mankind, while the science of language is not yet one century old, and its results are even to this day outside of the pale of common education. People who listen in earnest when you explain the laws that govern the movements of the heavenly bodies, would think you were jesting were you to ask why a cat is called *cat*? or why a man who has children is called *father*? Still, whatever be the origin of

language, we can not suppose that words have been cast to right and left upon things, haphazard. If we are reasonable beings, we may assume *à priori* that there must be a reason, even if we are not able to find it out, why certain things have been called by certain names; why, for instance, a certain domestic animal has been called *cat*, and a man who has children is called *father*.

But we can go further than this: not only there *must be* a reason for the meanings of our words, but *in most cases* we are able to find it out, and this by processes as certain and trustworthy as those of the chemist, who, after having analyzed a new substance, tells us that it belongs to such and such a family of chemical bodies, has such and such qualities, and is made up of such and such elements. This is what the science of language—or linguistic science, or comparative philology, as it is variously called—does with words.

Before proceeding to state and examine the theoretical principles which have been reached and which constitute the main body of this science, let us take some practical illustrations,

In this way, I think, the processes will become clearer and the theoretic principles will be more easily understood. Let us begin with one or two proper names, because in this, more perhaps than in any other province in the field of language, people are reluctant to admit a reason for the meanings of words. When one wants to name a child, he consults his memories, his taste, his fancy, his interest, often his caprice, but seldom, if ever, does he stop to ask whether the name he is going to choose may have a meaning. So when we call a girl by her name, "*Kitty*" for instance, we think of her, if we think of any thing at all, and never bother ourselves by asking what "*Kitty*" means. Most men would say that "*Kitty*" is a name for women, not for men ; but, as for its having any further significance, they neither understand nor believe it. In fact, had we nothing but this form of the name—*Kitty*—it would be difficult, even impossible, to tell whether there is any meaning in it. But we know that *Kitty* is a familiar, endearing form of the name *Kate* ; which, in its turn, is not an original form, but is derived from Katharine. The

word, then, with which we have really to deal, is not *Kitty*, but *Katharine*. *Katharine*, we can say at once, is not a name exclusively English; we have in German *Katharine*, in French *Catherine*, in Italian *Caterina* and *Catarina*, in Spanish *Catalina*. All these forms may be further decomposed: *ina* in Italian and Spanish, *ine* in French, are suffixes which denote diminution and at the same time endearment and gracefulness; thus, in Italian, *donna* means "woman"; *donnina* "a graceful little woman"; *cavalla*, "a mare"; *cavallina*, "a graceful spirited little mare," etc. From *Katharine*, then, we go back to a form *kathara*, which we find in Greek. *Katharos*, feminine *kathara*, is an adjective which means "pure." *Kitty*, then, is a secondary endearing form of *kathara*, and means "pure."

Now one might ask why "kathara" means pure? Why the *th* is preserved in German and English, and not in Italian and Spanish, where we have simply *t*? Why in Italian we have two forms, *Caterina* and *Catarina*? Why in Spanish we have *l*, *Catalina*? And, finally, why in tracing back the meaning of *Kitty*, we

went to Greek, and not, for instance, to Hebrew?

All these questions can be answered fully and with certainty, and many of them will be answered in the course of these pages. But for the sake of order and clearness, let us defer these investigations and proceed step by step; and, first, let us inquire into the meaning of another proper name.

Suppose we were asked what is the meaning of that vulgarism "Gene" which is used in some parts of this country. Of course we must go back to its full and correct form, Eugene. This is also a Greek word, "eugenès," which is a compound: "*eu*" "well"; "*genès*" derived from the root *gen*, which we have also in "progenitor," "generate," etc., and means "to generate," to "bring to life." So that "eugenès," as well as "Gene," which at first looks more like a puzzle than any thing else, means simply "well-born."

And now it would be easy and interesting to follow this root "gen" in Sanscrit, in Gothic, in Latin, in Greek and other kindred languages. But for the present we must let it alone:

doubtless it will fall again in our track, and then we shall dissect it as mercilessly as an anatomist. We shall be even more cruel: the anatomist plunges his scalpel into a dead, senseless body, while we shall tear open the heart and the brain of a being still palpitating with life.

Let us now make the subject of our considerations some of the most common words which we use every day, without ever suspecting that they carry, hidden in their bosom, the reason of their own meaning, and that their meaning was once entirely different from now, and often absolutely incompatible with our tendencies, habits and creeds, scientific as well as religious, social as well as political. Let us take for instance the word which I have just used: "*consideration*." It is easy to see that this word can be decomposed: *-tion* is a suffix which we find in very many words, as *termina-tion*, *meditation*, *elec-tion*, *reflec-tion*, etc., and is used generally in the formation (*forma-tion*) of abstract nouns. We see, moreover, that this word is formed from the verb to *consider*. Now we must ascertain where this *consider* comes from. We find in Latin the verb *considero* which has

the same meaning and is, beyond a doubt, the same verb as the English *consider*. Now one who knows Latin can easily see that this *considero*, in its turn, may be further decomposed, as *con* is a prefix which means *with*. We are left with the root *sider*. What does this mean? We have in Latin another word with the root *sider*: the word *sidus*, plural *sidera*, which means *star*.

What connection may there be between *stars* and *consideration*? A very open and easily intelligible connection, if we bear in mind the low state of civilization in which this old word must have been formed. In the remote past, when the Latins were no more advanced in civilization than those barbarians whom they were destined to conquer, the superstitious people, before undertaking any thing, before making any decision, used to consult the stars. So, in those times the man who said he wanted *to consider*, meant really that he wanted to look at the stars and see whether they were propitious to his undertaking or not. By and by, with the progress of civilization, such superstitious belief in the influence of the stars died

away, but the word remained; and when now we say, and we say it every moment, "I must consider this matter," we are no more aware of our mentioning any thing in connection with the stars, than I am aware of the fact that the ground on which I now rest my feet while writing, flies through space at the rate of thousands of miles an hour.

There is another word we use every day, of whose primitive meaning we are utterly unconscious: the word *conjecture*. This is also a Latin word: *coniectura*.—*Tura*, like *-tion*, is a suffix and is represented in English by *-ture*: *scrip-ture*, *na-ture*, *crea-ture*, etc. The verb *coniecto* is a Latin verb derived from *coniicio*, to "throw together," from *con*, together, and the root *iac* (which we see in the simple *iacio*) "to throw." *Conjecture*, then, brings us back to this root *iac* and means properly the action of "throwing together" something. Once superstitious people, before trying to guess at any thing, used to "throw together" little stones, dice, or other things of the kind, and according to the way these objects fell, they formed their opinion. A superstition which is not merely prehistoric,

after all. Very likely not a few of my readers remember having seen children toss up cents again and again in order to have a base for their guessing.

To the same root *iac* many other words are to be referred, like *e-jec-tion*, (*e*, out); *de-jec-tion* (*de*, down, downward); *ob-jec-tion* (*ob*, against; something, which one throws against), *ob-jec-tion-able*, etc. *Inter-jec-tion* means properly something which we throw in, *between* our words (Latin *inter*, between).

Thus, however different such words as *con-jecture*, *objectionable*, *interjection*, are in sound and meaning, they are all to be referred to the root *iac*.

The same root we meet in other Latin words, which have an echo in the English language. Thus, through the suffix *-ulu*, we have *iac-ulum*, which means *something to be thrown*, an arrow, a dart; *iaculus* was the name given to a serpent which is said to throw itself down from trees upon its prey. In connection with *iaculum*, we have the verb *iaculari*, which means *to throw*, *to dart off*; "*iaculatorius campus*" was the field where the youths practiced

with arrows and spears. From this verb "*iaculari*," with the prefix *e*, out, and the suffix *-tion*, which we have already met, is formed the English word *e-jacula-tion*, which means properly something which we "throw out" of our breast, a short prayer, which we speed as an arrow to heaven from the depth of our heart.

Take the word *pensively* and let us apply to it the scalpel of the comparative philologist. First we have the suffix *-ly*, which is employed to form so many English adjectives and adverbs: lovely, friendly, silly, wittily, stupidly, etc.—We shall see further on, where this *-ly* comes from, and what it means. We are left with the adjective *pensive*. In this we recognize the common suffix for adjectives—*ive*: sensit-ive, capt-ive, nat-ive, adject-ive, consumpt-ive, talkat-ive, primit-ive, etc. Thus we arrive at the root *pens*—the same that we find in the French "*pens-er*," Italian "*pens-are*," and Spanish "*pens-ar*," meaning "to think"; hence "*pensively*" corresponds exactly to "thoughtfully." But "think" is not the primitive meaning of the root *pens*. Its real meaning was to *weigh*; and the man who *thinks*

before he acts, *weighs* the pros and cons. But *pens* itself is not a primary root. As *ject* (in e-ject, in-ject, etc.) is formed from the past of the verb "iacio," so *pens* is formed from the past (pensum) of the verb "pend-ere," whose root *pend* means *to hang*. When we say: a misfortune is "im-pend-ing," we mean that it is "hanging" over us. One who is in "suspense," is swaying to and fro. One who is "dependent" on his friends, is "hanging on" them: but for their support he would fall to the ground. It is easy to see the connection between the meanings of the roots *pend* and *pens*, between *to hang* and *to weigh*.

But one might ask, how do you pass from the root *pend* to the root *pens*? What do you do with the *d* of *pend*? Is the loss of the *d* merely an arbitrary thing? Are we to believe then that Voltaire was right when he said that etymology is a science where vowels count for nothing and consonants very little?

Not so. So it was indeed, when etymology was no science at all; when the science of language was in no better state than astronomy or geography, when men believed that at even-

ing the sun was going to bed ; when it was taught in the schools that the so-called columns of Hercules were the end of the world ; and the earth was a large flat disk, encircled by the great river, Ocean. But it is *not* so now. The science of language or comparative philology admits no fact, not a change or a transposition, which it can not account for in a satisfactory way. The philologist is just as exact in his analysis of words as the chemist in his analysis of bodies.

The verb “pend-ere” takes, in its past, the suffix *sum*, which is very common in Latin for such formations. We should have then “pend-sum”. But there is a law which rules throughout the Latin language that a *d*, when it happens to be before *ans*, disappears. In the same way from the root *vid*, “to see,” we have *visio* (for *vid-sio*) which is in English “vision” ; from the root *cad*, “to fall,” and the preposition *ob* “toward,” before, we have the noun *oc-ca-sio* (for *ob-cad-sio*, the *b* of *ob* being *assimilated* with the following consonant, as in *oc-cur* from *ob-cur*, *oc-cident* from *ob-cident*, etc.), the English *occasion*, which means properly

something which "falls before us", which "we find in our way".

Pensum, then, is regularly formed from the root *pend*, and from "*pensum*" we derive the secondary root *pens*, from which the French verb "*pen-ser*," the English adjective *pensive*.

In Rome every matron used to weigh a certain quantity of wool, and give an equal share to each female slave to spin. Every one of these portions of wool was called *pensum*, that is, "weighed," and as that *pensum* represented the task assigned to each slave, this word *pensum* assumed very soon the meaning of *task*, and nowadays in Italy, beside the verb *pensare*, to think, we hear still the word *penso*, which means the task, especially the task given for punishment to school boys.

In speaking of the way we can bridge over from *pend* to *pens*, I said that there is a law in Latin, by which every *d* that is to be followed by an *s* disappears.

Are there such *laws* in languages? What kind of laws are they?

We must look into this subject a little deeper. The astronomer repudiated the wild

lawless fancies of the astrologist; he set to work, observed facts, compared them, improved his instruments of observation, and put down in his books every thing he observed, even the most insignificant phenomena, which were formerly overlooked as of no account. Then, when his collection of facts reached a considerable amount, he found out, by diligent studies and calculations and comparisons, that many phenomena could be grouped together under one and the same principle, which could explain them. Such a principle he called a *law*, because it governs all that group of phenomena. Then, by pursuing his researches, he found out another law, then another and still another. Further on a law was found which accounted for many laws previously discovered, and these were grouped together under that last and superior one, and so on, until finally a principle could be formulated which comprehended and accounted for all the principles discovered before, and such a principle was called a *system*—a Greek word which means exactly “that which stands together,” from the preposition *sun*, which corresponds to the Latin “cum” and means

"*with*," the root "*sta*," which means to stand, and the suffix "*ma*," the same that we have in "proble-ma" (problem), "theore-ma," (theorem), "program-ma," (program-me), etc.

In the same way the chemist, setting aside the dream of the alchemist, who wanted to find a way of turning every thing into gold, proceeded to inquire into facts, to investigate and analyze, to observe and compare, and so, by and by, he accumulated an enormous quantity of facts, discovered several principles under which many facts could be grouped together, found ulterior relations between groups and groups, principles and principles, formulated these new relations, and so on and on, till he became able to formulate a general principle, and to conceive a system capable of explaining the constitution of all bodies, either hidden in the breast of the earth, or floating in the vault of heaven. And one fact is not to be overlooked: while the putting aside of the speculations of the astrologists and the dreams of the alchemist, and the settling down to examine every day facts and analyze bodies which hardly had any claim to the attention of former savants, seemed

almost to degrade science into mere routine work, and forfeit a splendid world of poetic speculations for a hard, matter of fact drudgery, the result of this routine and drudgery turned out to be a world of knowledge far greater and far more sublime than any thing which the imagination of the alchemist or astrologist dared to conceive; and, what is more marvellous still, the system which the astronomer discovered from his specula, with his compass, his telescopes and calculations, came to coincide with the system worked out by the chemist in his smoky shop, with his retorts and scales. They are practically one and the same system, and the different and remote ways in which it has been found out are the best test of its value. The constitution of the world, as seen through the telescope of the astronomer, is exactly the same as looked at through the microscope and after the analysis of the chemist. In each of those rough irregular stones which make the streets of New York uncomfortable, we see exactly the same constitution, the same mechanical forces and movements, as the astronomer discovers in the endless world of planets

•

and suns rotating far beyond the limits of our atmosphere.

Not different from that of the astronomer has been the course pursued by the student of language. Discarding all the wild fancies that were honored with the name of etymologies, but had no base whatever except in the sleep-walking reasonings of their inventors ; throwing overboard the inane speculations about the pretended language first spoken in the world, the comparative philologist undertook to ascertain the facts quietly and steadily ; to analyze words with scientific and minute precision ; not to admit any thing except what had been reasonably proved ; and above all to compare ever and always. Comparison is the soul of science.

The result of these methods is that we are now as far advanced in the knowledge of what language is, in comparison with what was known one hundred years ago, as the modern chemist is beyond the alchemist of the middle ages. The comparative philologist has discovered that in the apparent confusion with which words grow into other words, and languages pass into other languages, there

are laws which govern the evolution of vowels into other vowels, of consonants into other consonants, just as in the apparent confusion of the sky there are laws which rule the movement of every sun, the appearing and disappearing of every comet.

The laws thus discovered by the science of language are rightly called *phonetic* laws, as *phone* means *sound*. Between the system of the astronomer and the chemist, and the laws discovered by the comparative philologist, we must, however, draw this distinction. Of those systems, however probable and possibly certain they are, we can not give a positive demonstration. All that we can say is, that it is impossible to demonstrate that they are *not* true. The comparative philologist, on the contrary, can positively show that the laws discovered by him are true; we can see them every day, at any moment, working in every word.

We shall see, further on, many of these laws, and their workings. Let us now bring other words under our linguistic microscope. Here is a very common word: what do you mean

when you say that Mrs. So-and-so is a *stylish* woman? Of course, you mean that she is elegant, that she dresses beautifully. But did you ever ask yourself where this word *stylish* comes from?

Not many of my readers, I dare say, have done so. Well, let us follow this word step by step, and try to find out what its first meaning was, and what changes, both in sound and meaning, it has gone through.

To most men, the stone, on which they stumble in their way, is nothing but a stone. But if you take it to the geologist, he will tell you what is its composition, to what age of the earth and to what strata it belongs, and with that stone he will take you back, far back, to the time when men lived in caverns, when the mastodon was roaming about, and when fields, now covered with flowers, were the bottom of a sea.

We can do the same with words; we can follow them back for centuries and centuries; we can go back to ages so remote, that no monument of any kind survives, no memories, but those hidden in these words which we use

every day, without even thinking of them. Of course, we can not go so far back as the geologist can ; but on the other hand, the interest is far greater, as the evolution of each one of such words is a fragment of our own history.

In *stylish* we have the suffix *-ish* which is to be found in many adjectives : as whit-ish, redd-ish, Engl-ish, child-ish, Ir-ish, etc. The fragment that remains, *styl-*, of course is to be connected with the noun *style*. We have in French *style*, in Italian *stile*, in Latin *stilus*. *Stilus* meant properly a little stick, usually of iron, pointed, with which the Romans used to write, by incision, on their waxed tablets. And, at first, to say that a man had a good *stilus* meant "he is a good penman". The "stilus" was really the pen of the Romans. Then, by a natural transition, "he has a good *stilus*" was said of the man who turned his periods well, who expressed his ideas in a charming way. Hence the meaning of the English "style," French "style," Italian "stile." In English we went further : we called *style* not only the way of *writing*, but the way of doing any thing, of dressing, etc. The word *stylish*, then, however strange it may

seem at first, is intimately connected with a word that meant "stick," and nothing else.

Still there are other words whose fundamental meaning is far more distant from their present meaning, than *stylish* is from stick or pen. Take the word *electrician*. *Electrician*, *electricity*, *electric*, are all formed directly from the Greek word *electron*, "amber," in which substance electricity was first discovered. When we say: "Edison is a great electrician," who, even among those who know the origin of the word, thinks any thing about amber? Such is the power of words!

Here is another word, whose evolution is not a bit less curious than that of the word "stilus," and which many a mother has to say of her children, without ever suspecting what is at the root of the word: *saucy*.

"Saucy" is formed, through the suffix *-y*, which is very common in English, directly from the substantive "sauce". "Sauce" is exactly the French word *sauce* transported from France to England. French, as Italian and Spanish and Portuguese and Provençal and Walachian and Rumansch, descends directly from the Latin;

it is one of the *Neo-Latin* or Romance languages. It is safe then to look to Latin for the etymology of "sauce," as for that of most French words.

To begin with, we know that whenever we have in Latin the group *al* followed by a consonant, this *al* becomes in French *au*: so the verb "*salt-are*," to jump, becomes in French "*saut-er*;" the word "*alt-us*," high, becomes "*haut*;" the word "*calidus*," warm, through the form "*cald-us*," becomes *chaud*; *alba*, the daybreak, becomes "*aube*;" "*altar*," "*autel*." In this way for "sauce," we must look for a word like *salce* or *salse* (because French *c* before *e*, *i*, represents a latin *s*). This *salse* carries us back to a Latin *salsa*, as a Latin *a* is represented in French by an *e*; which by and by came not to be pronounced. Now where can this Latin *salsa* come from? *Salsa* is but a form of the past participle of the verb, "*salere*," which means "to salt." "*Salsa*," then, in Latin and Italian, "sauce" in French and English, means nothing but "*salted*." It came to be used as a substantive to mean *something salted*, piquant. Hence "saucy," he, or she, who is "salted," sharp, flippant.

We have thus traced the word "saucy" back to its Latin form, giving reason for the least change of consonant, showing that even the change of an *a* into an *e* is not arbitrary, or casual, but in obedience to a law. Then we have followed the Latin word in its gradual development of meanings. There can not be the least shade of doubt that *saucy* has been derived directly from the Latin word *salere*. Still, how many are there who know that by saying *saucy* they say any thing connected with *salt*?

If now we look back at the words we have analyzed thus far, (*consideration, conjecture, pensive, stylish, electrician, saucy*), we can draw some general conclusions, which will help us in pursuing our investigations.

In the first place, we see that in order to find out what a word is, and what it means, and where it comes from, we must not take the word, so to speak, as a whole; we must analyze it, and resolve it into its components. We have seen that we have "suffixes," that is, additions at the end of a word; and "prefixes," or words put at the beginning of a word; we

have also “infixes” or sounds introduced into the body of a word. So in con-ject-ure, *con* is a prefix, *ure* is a suffix : in the Latin verb *iac-i-o*, from the root *iac*, *i* is an infix, and we could show that this infix once had a specific meaning ; but this, for the present, would carry us too far. These affixes (we call by this name all such formative elements) are also divided into primary and secondary, nominal and verbal ; but for our purpose, classification according to collocation is enough. What remains after having taken away all the additions in form of prefixes, infixes, and suffixes, is the “*root*” of the word. The “*root*” is the all-essential in words. *It is useless, it is absurd*, to try to find out the etymology of a word, if we do not know its root.

But how are we to get at the root of a word? By analysis and comparison ; by resolving the word into its elements, and by comparing those elements with the forms they assume in the same language, and in kindred languages. We must analyze and compare. Trust no sounds—sounds are treacherous and misleading. The etymologist of old was led merely by

affinity of sounds; he would not have found it difficult to connect, for instance, *spelling* and *dispelling*. But *spelling* belongs to a Gothic root whose fundamental meaning has not been yet ascertained, while *dispelling* is the present participle of the verb *dispel*, Latin *dispello*. *Dispello* is a compound of the prefix *dis*, atwo, in two directions, hither and thither; and the verb *pello*, to push; hence *dispellere*, to *dispel*, to push hither and thither, to disperse.

Again, how many would be ready to believe that there is a connection between *sect* and *insect*? But these words have nothing in common. *Sect* is from the root *secu*, which means to "*follow*"; we have it in "*persecute*," "*consequence*," (that which follows), "*pur-sue*," "*sui-tor*," etc. A propos of these two last words, we must notice that there is a phonetic law in the French language, according to which a *c* or a *g* which in a Latin word stands between two vowels, disappears in the evolution of that word from Latin into French; so *regina*, queen, becomes in French "*reine*"; *securus*, French *sûr*, sure; *magister*, French *maître*, and afterward *maître*, teacher; *amicus*, French *ami*, friend, etc. In the same way

Latin *sequ-i*, Low Latin *sequire* (for *secu-ire*) becomes in French *suivre*. In the same way we have "*pur-sue*" and the word *suitor* from "*secu-tor*." This *tor* is a very common suffix, in order to designate him who performs an action : protec-tor ; inven-tor ; collec-tor, etc. *Sect* then, from the root "*secu*" to follow, and its derivatives "*sectarian*," "*sectarianism*," etc., refer to those who *follow* the same tenets, whether in politics or theology, or any other pursuit. *Sect* and *sectarian*, like *party* and *partisan*, have no bad meaning in themselves ; but on account of the effects that absolute devotion to one set of ideas and persons has upon us, *sectarian*, *partisan*, and *fanatic* soon became synonymous. "*Insect*" is a compound word, from the preposition *in* and the root *sec* which means to *cut* ; the same root that we have in *section*, *segment* (for *sec-ment*), *dis-sect*, etc. *Insects* were so called on account of the conformation of their bodies, which are, as it were, divided into many sections, into many little rings.

Who would not readily assume that the Latin and the Greek word for God, *deus* and *theos*, are the same word slightly changed from

one to the other language? Still, comparative philology, which has no doubt that *consequence* and *sutor* belong to the same root, does not admit that *deus* and *theos* belong to the same root. To believe this, we should suppose that many of the phonetic laws of the Latin and Greek languages have been violated in the formation of those two words. But laws which can be violated thus, are not laws; a science, the laws of which admit of such unaccountable exceptions, is not a science.

We must then mistrust sounds utterly.

We must deal with words as the botanist deals with plants. To the layman many flowers look almost alike, and he would readily refer them to the same class; but if he turns to the classifications made by the botanist, he will see that those flowers belong to quite different families; while others which look so different one from the other, are classed together in the same family and species. Why? because the botanist does not trust colors, or other showy appearances: he looks at more fundamental characters, and on those he founds his classifications.

And as it is useless to try to classify herbs and flowers without having devoted a respectable amount of time to the study of botany, without having acquired the skill to distinguish between secondary and primary characters, it is equally useless to try to classify words, to group them together according to their derivation—which is properly what etymology means—if one has not devoted some time to the study of the science of language.

Besides the necessity of decomposing words into roots and secondary elements, we have seen that both their sounds and their meanings undergo some changes which we must follow step by step. Of these two evolutions of sounds and meanings, that of sounds is regulated by ascertained laws, and it is by far the more important. It may be that sometimes we can not explain satisfactorily the transition of a word from one meaning to another: meanings are often so affected by local and historical facts, usages, and prejudices, now lost, that it is difficult, not infrequently impossible, to follow and explain their evolution. But no change in

sound must be accepted if we can not show that it is in accordance with the phonetic laws that obtain in the language to which the word belongs. The phonetic laws must be our sheet-anchor in linguistic researches. This is what gives to the new science of language the exactness and precision of the physical sciences. Once a wag derived *violin* from Nebuchadnezzar; but this, which was very clever when applied to the fantastic etymologist of old, would be a very poor joke if aimed at the modern science of language. It would be the same as to confound astronomy with astrology, chemistry with alchemy.

The evolution of meaning, even though it is to be subordinate in our researches to the evolution of sound, has nevertheless no little importance. Thus, for instance, in the words which we have analyzed, from the "throwing" of dice or coppers to "conjecture," from "throwing" to "ejaculation," from "salt" to "saucy," from to "weigh" to to "think" (pensive), from "pen" (stilus) to "style" of writing, or dressing, we see a constant ascending evolution from a meaning more or less material to a meaning more

and more ideal, more and more spiritual. This is a constant evolution which we shall witness in almost all, I might say all, the words we shall have to examine. The process of language is a great metaphor—(metaphor is a Greek word and means transportation). Words first applied to material things, we transport to other things which are not material at all, but still have with those things some point or other of connection. Of all evolutions none is so interesting as this progressive idealization, because words are the mirrors of our minds and souls—the more interesting inasmuch as words are so intimately connected with us, so “con-natured” with us, that we seldom think of the possibility of looking at our speech as something separated from ourselves.

It is the same with language as it is with coal, if I am allowed to use so material an image. But what is not material in comparison with this subtile, aerial, almost imperceptible strength, which yet belts the world and sways it? The piece of coal which is dug out, hard and dirty, after one process and another, and still another, is ground, becomes lustrous and soft

dust, is turned into bright gaslight, or shines in electric light. The electric light and a piece of dirty coal—what is there in common between these things? Still a chemist can trace back, step by step, the origin of that light, and show how it has sprung directly from that lump of coal. In the same way, words which had merely a material meaning, are, by a sort of idealizing process, elevated, sublimated, into abstract, entirely ideal meanings.

The evolution of the meanings of words, nay, the very life of language, I said, is a great continual metaphor. Even the most common words which we use every moment as a matter of course, without caring to know where they come from, without even suspecting that they may once have meant something different from what they now mean, even these words have undergone the same metaphorical process; and if we analyze them, if we question them about their origin and their primitive meaning, they will answer us, they will show what amount of picturesque power is at the bottom of our language.

You say, for instance, “Mr. So-and-so was the

supporter of this resolution." You do not mean, of course, that he actually "buttressed" it up with hands and shoulders, that he lifted it up from the ground. Still, this is what is meant by *supporter*, from Latin *sub*, upward, and the root *port*, French "porter," Latin and Italian "portare"—to carry. The same metaphor we employ when we say: "He is the support of his family."

We hear also very often: "He speaks French, he speaks German *fluently*." If we take away the adverbial suffix *-ly*, we have *fluent*, which is nothing else than the present participle of the Latin verb *fluere*, "to flow." We mean then that words "flow" from his lips steadily and easily as water from a fountain. So the phrase "fluency of speech," if we just think over it a little, raises before us the image of a stately river flowing through valleys and plains.

Another very common phrase is: "I intend to do this, or that." The root *tend* means properly to "stretch," as we have it in the words "to *tend a bow*." "To intend" (with that *in* intensifying) means, as it were, to tend the bow

of one's mind toward something, to "aim" at something. And when we hear: "His intention is this," it does not require a great deal of imagination to see in the background of the word, if I may say so, a man tending his bow, ready to shoot his arrow. This certainly was the first meaning of the word, which, by the wear and tear of daily use, has lost its primitive picturesqueness, and retains only the substance, the sinew, so to speak, of its meaning; like an ancient Etruscan vase, which has lost its delicate outline, and has retained of its original self just enough to remind us of what it was.

Take the word "*appetite*." An etymologist of the old school, for whom facts were nothing and imagination was every thing, would perhaps have seen some connection between this word and the French *petite*, "small," and said that "appetite" means a small hunger, or have uttered some other nonsense of the kind.

Let us look, above all, into the body of the word; let us dissect it, and then we may safely say what it is, and what it comes from. *Appetite*, French *appétit*, Italian *appetito*, Latin *appetitus*, are all one and the same word. *Peti-*

tus is the past participle of the verb *petere*, which means to seek, to ask for (see "*petition*"). The preposition *ad* means "to," "toward." So that the real meaning of *appetite* is a *wishing* or *longing* for any thing, and it has come to be applied especially to food, although formerly it was said of almost every kind of desire, and especially of the passions, of the longings which torment our poor, frail human nature.

Now let us inquire further into the origin of this word *pet-ere*; its meaning, "to *wish*," is too immaterial to be primitive. There must be some other less ideal meaning at the bottom. We find in Latin itself this root *pet*, Greek *pet*, Sanskrit *pat*, which means to "fly," and also to run very quickly. We see clearly this meaning in the word "im-pet-us," in the Greek verb *pet-omai* which means "to fly," and in all derivatives from the Sanskrit root *pat*. The verb *appetere*, then, means properly to *run toward something*, that is, to *long for it*, to wish.

This Sanskrit root *pat* is to be found in some other English words. From this root and the suffix *-tra*, (Latin *-trum*, Greek *-tron*), we have

the word *pat-tra*, and then *pa-tra*, which means the instrument with which one flies, that is a "feather," a wing. In the Teutonic languages, a Sanskrit or Latin *p* is generally represented by *f*: for instance, Sanskrit *pitar*, Latin *pater*, German *vater*, English *father*. In the same way this Sanskrit word *patra*, corresponds normally to the Gothic *fadar*, to the old High German *fedara*, and to the English *feather*.

But from the root *pat*, which in Latin is, as we have seen, *pet*, we have another word, *pet-na*, Latin "pen-na," which means, also, an instrument for flying—a feather. But as a feather was used for writing, the word *penna* came very naturally to have the meaning of *pen*, and *pen* is nothing else than the Latin *penna*. *Appetite*, then, and *pen* and *feather* have at the bottom one and the same root, and if we have any faith in facts, any confidence in the power of human reason, we can not entertain a doubt that this fact is true, just as it is true that *sect* and *insect*, *deus* and *theos*, however similar, have nothing in common.

We may notice in passing that it is not the curious and complicated words, but the com-

mon and familiar ones which teach us the most. Many wonder what the etymology of *algebra* may be, of *alcohol*, *odometer*, *seismograph*, etc. But they do not know, they do not even suspect that a treasure of historical and prehistorical information lies hidden in every one of the words which they use in their daily intercourse with their children, their wives, their friends. It is always the same old story : men dream about fabulous mines that will make so many Crœsuses of them, and do not see that wealth lies in store for them at their very door, if only they would cultivate their ground properly and avail themselves of the present opportunities. We all dream about future probabilities, but the characteristic of true genius is to make the best of every thing that lies near at hand. Men had to go to work mines in California to find out what heaps of gold lay hidden in all those fields if only they were tilled ; men had to learn Sanskrit to find out what inexhaustible stores of information, linguistic, historical, and philosophical were gathered in their every day talking, in the dialects of the humblest and most uneducated people.

Let us continue our researches, still looking at the most common words. Take the word *application*. We must separate the well known suffix *tion*; we must take away the prefix *ad*, whose *d* has been assimilated to the following consonant, as “ad-petitus ” gives “ap-petitus,” “appetite ”; as “ad-plause ” gives “ap-plause ”; as “ad-prove ” gives “approve,” etc. We are left with the root *plic*. This we find in Latin and means *to fold*; hence *application* is the folding of one thing against another, the *applying* it to another thing. And when we speak of *mental application*, properly we mean that our mind “folds itself upon,” “attaches itself to” some subject.

Likewise when we say that a thing is *complicated*, properly we mean that it has many folds, it is folded again and again, so as to make it difficult to unravel it, to explain it. This root *plic* we find again in many Latin words, and of course in languages, such as French, Italian and Spanish, derived from Latin. We have for instance the words *duplex*, *triplex*, *quadruplex*, etc., which give in Italian *duplice*, *triplice*, *quadruplice*, etc. In

French, according to the law which we have already seen, that a consonant between two vowels disappears, we have *double, triple, quadruple*, etc. These words mean “*two, three, four, times as much,*” or else “*of two, three, four different kinds ;*” but their primitive meaning was simply that a thing was “folded” two, three, or four times. In the same way, and with the same evolutions of meaning, we have from the root “fold,” *twofold, threefold, fourfold, manifold*.

Let us now take the word *experience*. The ideas conveyed by this word are so immaterial, and so complex, that at first it seems hardly possible to unravel it, and reduce it to a single root with a single material meaning. Still the process is easy and certain. *Experience* is the same word as the French *expérience*, Latin *experientia*. From this we must separate the whole suffix *i-entia*, which is represented in English and French by *-ence* (conf. *aud-ience*, Latin *aud-ientia*, from the root *aud*, to hear). Of course it is possible to analyze further this suffix *i-ence*, and see how it was formed. But for the present it will

suffice for our purpose to recognize the formative character of this part of the word, *i-ence*. From what remains, *exper*, we must still take away the prefix *ex* which means *out*, and is to be met in very many English words of Latin origin. We arrive at last at the root *per*. This same root, which we have in Latin *ex-per-ior*, Greek *peir-ao*, means *to go through*; hence *ex-per-tus*, *expert*, is the man who has “gone through and has come out”; *experience* is the wisdom of an expert, and also, in English, the act of going through some trial. This root *per* is to be connected with the English *to “fare,”* German *fahren*, Gothic *faran*, because, as we have just seen, we must expect to find an *f* in the Teutonic languages whenever we have a *p* in Latin or Greek. Compare *father* with Latin *pater*.

Here we have two words, which many people not acquainted with the science of language, would fain group together: *to decide* and *deciduous*. Both of them are of Latin origin, but *decide* is formed from the preposition *de* and the root *cīd*, a weakened form of the root *caed* which means *to cut*, and also *to kill*.

Hence to *decide*, *decision*, mean to cut a question short, to separate wrong from right. The same root we have in *homicide*, to cut, to kill a man; *suicide*, the killing of one's self.

Deciduous is from the preposition *de* and the root *cīd*; which is in its turn a weakened form of the root *cad* (compare *iic* in *con-iic-io* from *iac*) which means "to fall"; hence *deciduous* means "falling down," "subject to falling down." This same root *cad* that we have seen already in *occasion*, recurs in its weakened form *cīd*, in *occident*, which means properly "falling down," but came to be applied to the sunset, that is, to the place or time where the sun falls down.

Now a reader with an inquisitive mind might ask why in *occasion* we have *a* (from *cad*) and in *occident* we have *i*. The reason is that *occasion* is derived from a form of the past of the verb *cad-ere*, where through the accidents of the conjugation, the *a* of the root *cad* becomes long, and is also accented; which two facts, the *length* and the *accent*, work very efficiently in the preservation of any sound. *Occident* on the contrary is properly

the present participle of the verb *occidere*, where the *a* not being accented and not being long, dwindles very easily into *i*. This same fact of accented syllables preserved in all or almost all their integrity, and unaccented syllables passing from broader into more closed and less distinct sounds, we can see in the evolution of almost every word.

The same difference as that between *decision* and *deciduous*, we have between *incision* (*in* and *cīd*, from *caed*, to cut in) and *incident* (from *in* and *cīd* from *cad*), something that falls in our way. *Casual* is also derived from the root *cad* (*cad-sual*, as occasion for *occad-sion*); "that happens to fall, to occur." So *case*, Latin *casus*, (from *cad-sus*) is something which has happened.

As another instance of phonetic laws, we may observe, that in Latin, while *d* before *s* disappears, *d* before *t* is turned into *s*; for instance the adjective *catharos*, from which we have seen Katharine is derived, comes from a root "*cadh*," which means to "purify." This root is in Latin *cad*, and to it we must refer the adjective *cas-tus* (for *cad-tus*), chaste, pure.

But let us hasten to conclude this too long introductory chapter. We have seen that words can be dissected and analyzed, like any material form ; that such dissections are to be carried on by comparative method ; that, as a result of such dissections, words appear to consist of *roots* and of certain formative additions, which we may comprehend under the general name of *affixes*. All the roots that we have analyzed, and all those that we shall analyze hereinafter, have at the bottom a mere material meaning, which by and by, through an ascending metaphorical evolution, has been turned to a less and less material, and finally to an utterly immaterial signification. We may also observe that all these roots are monosyllabic ; in fact, such are *all* roots. When by dissecting a word we arrive at a fragment with two syllables, we may assume that the fragment is not a root. At least, it is not a primary root ; it is a secondary formation which can be dissected further still.

Moreover, we have caught a glimpse of the existence of phonetic laws. This growing of sounds into other sounds, this forming and

decaying of words, which seems so disorderly and chaotic, is not so at all. Laws rule the world of sounds as well as the world of stars.

The next chapter will be devoted to a further study of these laws, and to a consideration of other instances of their working.

II.

SOUNDS AND LANGUAGE.

What can seem simpler than the A B C, and what is more difficult when we come to examine it ?—MAX MÜLLER.

To enable ourselves to understand better the nature of the laws that govern the changes in the sounds of which words consist, it is but natural to investigate first what these sounds are.

The majority of the sounds which we utter in speaking English are represented by the English alphabet. There are many little nuances, especially vowel sounds, which our alphabet fails to represent ; but, for our purpose, we may fairly neglect such exceptions, and assume that our alphabet represents all the sounds we utter in our speech.

These sounds, as every school-boy knows, are divided into *vowels* and *consonants*. But what is a *vowel*? What is a *consonant*? These things are so elementary that every one is

presumed to know them ; yet they involve such difficult problems, linguistic and physiological at once, that thus far there is not a definition of these two classes of sounds, which is agreed upon by all scholars. The common distinction, taught in schools, that vowels are sounds which can be uttered alone, by themselves, while consonants can not be uttered without the accompaniment, and, as it were, the support of a vowel, is evidently untrue, for many consonants (for instance *th*, *f*, *sh*, and *s*,) can be pronounced very easily without the help of a vowel.

To this classification we shall return presently. But how are all these sounds formed? what is their nature and their individual characteristics?

In answer I quote from Huxley's *Elements of Physiology*, where the physiology of vocal sounds is explained most clearly and concisely.

“ *Speech* is voice modulated by the throat, tongue, and lips.

“ The *modulation* of the voice into speech is effected by changing the form of the cavity of the mouth and nose by the action of the muscles which move the walls of those parts.

“ The pure vowel sounds E (in *he*), A (in *hay*),

A (in *ah*), O (in *oh*), OO (in *cool*), may be all formed out of one note, produced by a continuous expiration, the mouth being kept open, but the form of its aperture being changed for each vowel. It will be narrowest, with the lips most drawn back, in E, widest in A, and roundest, with the lips most protruded, in OO.

“Certain consonants also may be pronounced without interrupting the current of the expired air, by modification of the form of the throat and mouth.

“Thus the aspirate, H, is the result of a little extra expiratory force, a sort of incipient cough.

“S and Z, Sh and J (as in *jugular*=G soft as in *gentry*), Th, L, R, F, V, may likewise all be produced by continuous currents of air forced through the mouth, the shape of the cavity of which is peculiarly modified by the tongue and lips.

“All the vocal sounds hitherto noted so far resemble one another, that their production does not involve the stoppage of the current of air which traverses either of the modulating passages.

“ But the sounds of M and N can only be formed by blocking the current of air which passes through the mouth, while free passage is left through the nose. For M the mouth is shut by the lips; for N, by application of the tongue to the palate.

“ *Explosive-consonants.* The other consonantal sounds of the English language are produced by shutting the passage through both nose and mouth; and, as it were, forcing the expiratory vocal current through the obstacle furnished by the latter, the character of which obstacle gives each consonant its peculiarity. Thus in producing the consonants B and P, the mouth is shut by the lips, which are then forced open in this *explosive* manner. In T and D, the mouth passage is suddenly barred by the application of the point of the tongue to the teeth or to the front part of the palate; while in K and G (hard *a*ŋ in *go*) the middle and back of the tongue are similarly forced against the palate.”

In order to have a clear idea of these words and of what we are going to say, the reader will find it very useful to pronounce each sound of the alphabet, and pay attention to the position that his lips and tongue assume.

It appears from this description, that we can in the first place divide all consonants into two classes :

1. Those in the pronunciation of which the current of air is continuous ; H, S, Z, Sh, J, G soft, Th, L, R, F, V. These are called *continuous* consonants.

2. Those in the pronunciation of which the current of air is stopped, either through the mouth (M, N,) or through both mouth and nose (B, P, T, D, K, C hard). These are called *momentaneous* or *explosive* consonants.

Now we must make another classification, more important still, according to the organs, (lips, teeth, and back palate or throat as the case may be), which play the principal part in their utterance. This classification is as follows :

Labial, P, B, M, F, V, (F, V, properly labio-dental).

Dental, T, D, Th, N, L, R, S, Z.

Guttural, K, G, (hard).

Palatal, Ch, J.

Besides, we have a classification, not entirely justifiable, but very common, of *soft* and *hard*

consonants. P, T, C, (as in *cost*) are called *hard*, and B, D, G, (as in *go*) are called *soft*, because with the former the current of air is checked with some greater strength. H, Ph (f), Th are called *aspirates*.

As to the distinction between *vowels* and *consonants*, that given by Professor Whitney (Oriental and Linguistic Studies, 11 Series, p. 281) seems to me the most satisfactory.

"The organs of the lungs and throat furnish the column of air, the breath or tone; the organs of the mouth modify this breath or tone and give it various individuality.

"Those sounds, in which the material, the element of tone, predominates, are vowels; those in which the other element, the oral modification, predominates, are consonants; but there is no absolute line of division between the two great classes; each has its degrees whereby it approaches the other; there is a continuous line of progression from the openest and purest vowel to the closest and most absolute consonant, and a border territory between, where the sounds are of doubtful or double character."

Conformably to this principle, we have sounds which are classified as semi-vowels, (L and R).

The classification of the consonants, which we have just given, is very imperfect. This study of sounds in human speech is one of the most delicate branches of science, no less interesting to the anatomist, the physiologist, and the ethnologist, than to the philologist. Hence the distinctions in sounds are carried to a degree of subtlety which seems impossible to one who is not familiar with phonetic studies. And it is very interesting to investigate the nature of all the shades of sounds which are to be heard in all human languages. But this would far exceed the limits, and alter entirely the nature, of this work. We must confine ourselves to the simplest and most elementary notions, happy if some reader will hereafter feel inclined to look more closely into the subject. His praiseworthy curiosity will be satisfied, then, by special works, of which there is no dearth.

From a glance at the classification given above, we may infer that a close connection exists between all these sounds : a slight altera-

tion in the position of the lips, or tongue, or teeth, produces quite a different sound. Thus, if we apply the tip of our tongue to the front of the palate, we utter the sound *d*; if we fold our tongue a little more backward, we have the sound *r*. A little more backward still, and we have the sound *l*. If we check with our lips the current of air, we have the sound *b*; if we do the same thing with a little more strength, we have the sound *p*. We can thus understand how easy it is to pass from one sound to another. It is this *physiological affinity* of sounds that makes the changes which we see in words *possible*. That such changes are not only *possible* but *actual*, every language bears witness. To see *how* such changes happen, to discover what principles, if any, govern such changes, is one of the main objects of the science of language.

No two persons pronounce in the same manner. As there are not two faces alike, so no word is pronounced *exactly, mathematically*, in the same way by two different men. Of course we do not notice such differences unless they are strongly marked. The pronunciation of

children, for instance, is quite peculiar, because their organs of speech are not educated; we hear children saying *tiss* for *kiss*, *tat* for *cat*, *fink* for *think*, *thor* for *for*. Such differences are more marked and noticeable with people of different nations. So a Frenchman does not say *the* but *ze*; his organs can not be taught to pronounce *th*, just as the hardened muscles of the fingers of an old man cannot, certainly not without great difficulty, be taught to play rapidly on the piano. A German says *vat* for *what*, *chutche* for *judge*; a negro *dere* for *there*. It is true that a French child, brought up among English-speaking people, would learn English just as well as the children born of English parents, and English would be just as natural to him as French was to his father. But it is true, also, that if he is brought up among French-speaking people, his vocal organs will be educated so as to pronounce French sounds, and, when he is fully grown up, they will be unable to pronounce easily and correctly many sounds which are foreign to the French language.

And as an individual can learn a foreign lan-

guage, so a family, a community, an entire people may learn and adopt a language entirely different from that of their forefathers. But it is natural that in the process of adoption the language adopted should undergo many changes, so as to adapt itself to differently educated vocal organs. This is not merely an hypothesis, but has really happened, and is happening even to-day. Of course, such changes do not take place in one day; they are brought about slowly, steadily, by causes which work, not only on individuals, but on generations. And, what is most important, the changes are not disorderly and chaotic, as might be expected, but they obey certain laws, which it is the work of the linguist to investigate.

We know that French, Italian and Spanish are languages connected by ties of brotherhood, and that they all spring from Latin. In other words, where now French, Italian and Spanish are spoken, once Latin was spoken. To the same family belong Provençal, Walachian, Portuguese and Rumansch.

Now, if we look at French, Italian and Span-

ish words, it seems impossible that any law should govern their changes from Latin. Still all these changes, however confusing at first sight, were wrought in obedience to certain laws which comparative philology has discovered.

For instance, in the evolution of words from Latin into French, we find three general principles: 1st. The accent is preserved on the same syllable as in Latin: although the last part of the word is suppressed either in pronunciation, or both in pronunciation and spelling. 2nd. The short vowel between two consonants is very often suppressed; for instance *bonitatem* gives *bonté*, English *bounty*; *comitem*, French *comte*, English *count*; *feritatem*, French *fierté*. 3rd. The consonant (whether dental or guttural or labial) between two vowels is very often suppressed. This is a very important principle, and striking changes are effected by it. We have referred already to *maistre* and *maître* from *magister*. "*Securus*" gives *sûr*; *crudelis* gives *cruel*; *pacare*, which means to calm, to satisfy, gives *payer*, to pay; *regem* gives *roi*, king; *legem* gives *loi*, law; *maturus*

gives *mûr*, ripe; *imperator* gives *empereur*, emperor; *frigidus* gives *froid*, cold; *iocus*, gives *jeu*, play; *focus* gives *feu*, fire; *paucum* gives *peu*, few.

The Italian language does not truncate the Latin words at the end so much as the French does; besides Italian preserves with more faithfulness the consonant between two vowels. Spanish preserves the ending of words better than French, sometimes better even than Italian; as for the consonant between two vowels, it does not suppress it but changes it; *c* becomes *g*; *p* becomes *b*, and then sometimes *v*, *t* becomes *d*, *d* disappears. So that in the main, Spanish holds a position intermediate between Italian and French, in respect to the changes made in Latin words. For instance, Latin *sentitus*, felt, Italian *sentito*, Spanish *sentido*, French *sentir*; Latin *focus*, fire, Italian *fuoco*, Spanish *fuego*, French *feu*; Latin *salutare*, to salute, Italian *salutare*, Spanish *saludar*, French *saluer*; Latin *amicus*, friend, Italian *amico*, Spanish *amigo*, French *ami*; *inimicus*, enemy, Italian *inimico* (or *nemico*), Spanish *inimigo*, French *ennemi*; *securus*, sure, Italian *sicuro*, Spanish *se-*

guro, French *sûr* ; *lupus*, wolf, Italian *lupo*, Spanish *lobo* (pronounced *lovo*), French *loup*, in which the *p* is no longer sounded.

Of course, from these principles there are many divergences, which, however, can, for the most part, be classified and accounted for ; for instance, in many cases the dental (*t* or *d*) between two vowels disappears in Italian also, thus removing Italian further from the Latin than Spanish itself. All the abstracts in *-atem*, *-utem*, in Spanish end in *-ad*, *-ud*, thus preserving the *t* changed into *d*, while in Italian no trace is left of the dental, these words ending in *d*, *ú* ; so from Latin *veritatem*, truth ; *bonitatem*, bounty ; *virtutem*, virtue, we have in Italian *verità*, *bontà*, *virtù* ; in French *vérité*, *bonté*, *vertu* ; in Spanish *verdad*, *bontad*, *virtud*.

It is interesting to trace comparatively, in Italian, French and Spanish the changes undergone by certain Latin consonantal groups. Take for instance the group *ct*, which is very frequent in Latin. In Italian the *c* has been assimilated to the *t*, so that *ct* becomes *tt*. Thus *factum*, fact, becomes *fatto* ; *noctem*, night, *notte* ; *lacte*, milk, *latte* ; *octo*, eight, *otto*.

In French *ct* becomes *jt* and then *it* ; *fait*, *nuit*, *lait*, *huit*. In Spanish *ct* becomes *ch* ; *noche*, night, *ocho*, eight. Besides, through a phenomenon which can be satisfactorily explained, the *a* before such *ch* is changed into *e* ; *leche*, milk, instead of *lache*. As for *factum*, it should then become *fecho*. But here we must notice another law which prevails in Spanish phonology : a Latin *f* at the beginning of a word has generally become *h* in Spanish ; *facere*, to do, Spanish *hacer* ; *fatum*, fate, *hado* ; *farina*, flour, *harina* ; *ferire*, to strike, *herir* ; *filius*, son, *hijo* ; *filum*, thread, *hilo*, etc. So that we must expect from *factum* not *fecho*, but *hecho* ; and such is really the Spanish word for Latin *factum*, done.

Summing up, then, *fait*, *fatto* and *hecho* are exactly one and the same Latin word, reflected, as it were, in the mirror of three different languages. This example adds strength to the warning not to trust sounds in etymologies, but to follow rigorously the phonetic laws which prevail in the language to which the words in question belong.

The Latin group *pl* is changed into *pi* in Italian, into *ll* in Spanish ; it is preserved in

French. Latin *plaga*, blow, wound ; French *plaie*, Italian *piaga*, Spanish *llaga*. Latin *planum*, plain ; French *plan*, Italian *piano*, Spanish *llano*. Latin *plenum*, full ; French *plein*, Italian *pieno*, Spanish *lleno*. Exactly the same thing happens for the group *fl*. Latin *flamma*, flame ; French *flamme*, Italian *fiamma*, Spanish *llama*. *Sufflare*, to blow ; French *souffler*, Italian *soffiare*, Spanish *sollar*. The group *cl* is preserved in French, becomes *chi* in Italian, *ll* in Spanish : *clavis*, key ; French *clef*, Italian *chiave*, Spanish *llave* ; *clamare*, to call ; French, *clamer* (*réclamer*), Italian *chiamare*, Spanish *llamar*.

Al followed by a consonant is preserved in Italian ; in French it becomes *au*, as we have seen, and in Spanish *o*. The evolution is the same in French and Spanish, only the spelling is different. Latin *alter*, other ; Italian *altro*, French *autre*, Spanish *otro*. Latin *alba*, dawn ; Italian *alba*, French *aube*, Spanish *oba*. Such symmetrical evolutions of sounds, however important and striking, are not the only points on which the philologist rests in asserting that French, Italian and Spanish are lan-

guages derived from one and the same source. If we proceed to investigate their grammar, their kinship stands forth even with greater evidence. They have exactly the same way of conjugating their verbs, of using their adjectives, their pronouns, their prepositions. Not only their vocabulary, but their grammar, which is the real skeleton of a language, is essentially the same. The same holds good for the other Neo-Latin languages—Portuguese, Walachian, Provençal and Rumansch.

The Latin language now is dead: it survives itself, so to speak, in the monuments of Roman literature, and in the rites of the Catholic church. But suppose even such remains had disappeared; suppose that through some great calamity, not even a fragment of a Latin book, not even an inscription, had been left to us; even then the philologist, holding the so-called Neo-Latin languages under his linguistic microscope, dissecting their grammar and their vocabulary, would be able to assert, with no less convincing evidence, that these languages must have sprung from one language, the existence of which we

can not doubt. And as the paleontologist, with a fragment of a fossil bone, can reconstruct the skeleton of the animal to which it belonged thousands of years ago, in the same way the philologist could not only give convincing proofs of the existence of a common mother-language for French and Italian and Spanish, but would also reconstruct in their most essential characters, both the grammar and vocabulary of the said mother-language.

Such a reconstruction is in this case useless, since we have preserved in glorious monuments almost the whole body of the Latin language.

But there is another family of languages, in which the case we have supposed for Latin has actually occurred. This family is known under the name of *Indo-European* or *Aryan* family. The primitive Indo-European language has disappeared. Still the philologist can show, with no less evidence than for the Neo-Latin languages, that the Indo-European languages belong to the same family, that there *must* have been once a language from which they all sprung, and he can, up to a certain point, rebuild the grammatical organism of that language, and a part of its vocabulary.

This family comprehends the languages of the peoples who are now at the head of civilization; languages which are spoken in a great part of Asia, and all over Europe and America.

It is divided into seven great branches—

- | | | |
|-------------------|---|---|
| I. Indic, | { | Vedic Sanskrit,
Modern Sanskrit,
Pali and Prakrit (spoken in India). |
| II. Iranic, | { | Zend,
Cuneiform Inscriptions,
Persian. |
| III. Celtic, | { | Cymric,
Gaelic. |
| IV. Italic, | { | Oscan,
Latin—
Umbrian. |
| | { | Neo-Latin
Languages. |
| | { | Italian,
French,
Spanish,
Portuguese,
Provençal,
Walachian,
Rumansch. |
| V. Hellenic, | { | Greek (four dialects).
Modern Greek. |
| VI. Letto-Slavic, | { | Old Prussian,
Ecclesiastical Slavonic,
Russian Language. |
| | { | High German, { |
| | | Old High German,
Middle High German,
Modern High German. |
| VII. Teutonic, | { | Low German, { |
| | | Gothic,
<i>Anglo-Saxon (English),</i>
Old Dutch,
Old Frisian,
Old Saxon. |
| | { | Scandinavian. |

Indic and Iranic constitute the Asiatic divis-

ion, the other five groups constitute the European division of the Indo-European languages.

From the table it appears that English is a Teutonic language, belonging to the Low-German group.

If we analyze all these languages in their grammar and their vocabulary, their kinship is not less evident than the brotherhood of French, Spanish and Italian. Moreover, although the language from which they spring is dead, we can show that not only these languages, but the peoples who speak these languages, belong to the same family. They all come from one common stock, which once lived in the high plains of Central Asia ; thence they separated, and as a magnificent tree that splits itself into two trunks, each one of which puts forth branches and twigs and boughs in every direction, from that common stock a branch went forth eastward, others found their way westward, and one after the other went so far that all the western part of the world, Europe, and America itself, has been covered by them.

This identity of race of the peoples speaking one of the Indo-European languages rests on

more arguments than those which comparative philology can give ; and needs further illustration. Suffice it, for the present, to know that the Indo-European languages constitute one family, and are derived from one common mother ; and that the proofs of this assertion rest on the comparison of their vocabularies, especially of the most familiar and indispensable words ; but, above all, on the comparison of their grammar. They have essentially a common grammar, and entirely distinct from that of all other languages.

In making such comparisons the philologists discovered that here too every change of sound obeys some definite law, and that each language reflects certain sounds, whether vowels or consonants, according to laws peculiar to itself, but in strict connection with the laws ruling the cognate languages. One of the most important of these laws is that which rules the changes of the consonants from one Indo-European language to another. This law is known by the name of its discoverer, as *Grimm's law*. Grimm made the important discovery that if we put Sanskrit, Greek and Latin on one side,

Low German (from which Gothic and Anglo-Saxon and English) in the middle, and Old High German on the other side, we see that an *aspirate* of the first group is represented by a *soft* in the middle group, and by a *hard* in the other group ; a *soft* in the first group is represented by a *hard* in the middle, by an *aspirate* in the other ; a *hard* in the first group is represented by an *aspirate* in the middle, by a *soft* in the last group. We have a *rotation* of consonants. The simplest form into which Grimm's law can be put is the following table (J. Peile, *Introd. to Greek and Lat. Etymol.*), in which A stands for aspirate, S for soft, H for hard. The word ASH may serve as a *memoria technica* for the whole :—

Sanskrit, Greek, Latin.	Low German, Gothic, Anglo-Saxon, English.	Old High German.
A	S	H
S	H	A
H	A	S

Thus, if we have an *h* in Latin, we must expect to have a *g* in English, a *k* in Old High German : Latin *hanser*, English *goose*, Old High

German *kans* (Modern High German *gans*). The following are a few examples of Grimm's law :—

Greek *chortos*, Latin *hortus*, Old High German *karto*, English *garden* (connected with *gird*).

Sanskrit *bhu*, Greek *phuo*, Latin *fu-i* (*fu-ture*), English *be*, Old High German *pim* (I am).

Sanskrit *bhrâtar*, Greek *phratrîa*, Latin *frater*, Gothic *brôthar* (English *brother*), Old High German *pruodar*.

Sanskrit *dasan*, Greek *deka*, Latin *decem*, Gothic *taihun* (English *ten*), Old High German *zehan*.

Sanskrit *dva*, Greek and Latin *duo*, Gothic *twai* (English *two*), German *zwei*.

Sanskrit *trî*, Greek *trêis*, Latin *tres*, Gothic *threis* (English *three*), Old High German *drî*.

Sanskrit *pat*, to fly, Greek *pet-omai*, Latin *pet-o*, *pen-na* (from *pet-na*), Old High German *fedara* (a wing), English *feather*.

Sanskrit *tan* (to stretch), Greek *tein-o*, Latin *ten-d-o*, *ten-u-is*, English *thin*, Old High German *dunat*.

Sanskrit *par*, to bring over, to go over,

Greek *peir-ao*, Gothic *faran*, (English *fare*).
German *erfahren*.

Sanskrit *prī*, to please, Greek *praūs*, English *friend*.

For German and English in particular, we may add the following instances :

I.

II.

III.

Drei, three ;	Zehn, ten ;	Tag, day ;
Du, thou ;	Zahn, tooth ;	Trommel, drum ;
Denn, then ;	Zinn, tin ;	Traum, dream ;
Durch, through ;	Zerren, tear ;	Taube, dove.
Denken, think ;	Zange, tong ;	
Danken, thank ;		
Durst, thirst ;		

We could go further, and add many other evidences of the reality of Grimm's law. But I think the instances produced are enough to convince even the most skeptical readers. One observation, however, is of the greatest importance about the meaning of this law. Ours would be a serious mistake if we should so understand Grimm's law as to believe, for instance, that a soft Greek-Latin becomes a

hard consonant in Low German ; that is to say, the *d* of Greek-Latin *duo* becomes *t* in Gothic *twai* ; and the Greek and Latin *t* of *treis* and *tres* becomes *th* in Gothic *threis*. The consequence of this would be that Gothic has taken its words from Latin or Greek. But it is nothing of the kind. The Gothic *twai* and *threis* are not derived from Latin and Greek *duo*, *tres*, (or *treis*) any more than the Spanish *amigo* and the French *ami* are derived from the Italian *amico*. As *amico*, *amigo* and *ami* are all three independent reflections; according to specific laws, of the Latin *amicus*, so the Low German and the Old High German and Greek and Latin words are independent reproductions of the words of that primitive Indo-European speech from which all of them are derived. For this reason, in expounding Grimm's law, I do not say that a Greek and Latin aspirate *becomes* soft in Low German, and hard in Old High German, but that it is *represented* by a soft in Latin, by a hard in Old High German, and so on.

Now that we have seen how words grow into other words, and changes are wrought in their

constitution in obedience to certain laws, the important question arises, at which we have hinted already: "*why* do such changes arise?" If Latin was the language once spoken in France, Italy and Spain, why do they say *ami* in French, *amigo* in Spanish, *amico* in Italian? Why did they not preserve the Latin word *amicus*? or, if a change had to come, why was not the result the same with the three peoples? And in the Indo-European field at large, if the ancestors of these peoples spoke at one time one and the same language, why was not that language preserved? and if it had to change, why did it not change in the same way with all their descendants? Why should we have *pitar* in Sanskrit, *pater* in Latin, *patēr* in Greek, *father* in English?

These questions, which are to the point, contain two parts; 1st. Why changes in languages happen? 2nd. Why such changes are different and bring about different results with different peoples?

Let us begin by the first question. To ask why languages change is, in other words, to ask "why languages live and die?" and by

merely putting the question, we recognize that languages have life, and decay, and death. Nor are we wrong. Languages are truly living organisms. The comparison is old, of words with leaves, which fade when autumn approaches and fall to the ground, to make place for other leaves that will bud forth when spring arrives. So that the question "why languages change?" implies first of all a great metaphysical problem: it is the same as to ask why trees die, why every thing in this world that is born is subject to decay and death. We can point out how such decay happens, but we can not give an ultimate cause for it. We should first be able to unravel the mystery of our own existence, of all existence, and to answer satisfactorily the query: "What is life?" The stately oaks under whose shade Virgil used to meditate his charming poems, are dead; so is the language in which his beautiful imaginings are clad. Wherefore? Who can tell?

But if this last wherefore escapes our knowledge, we can at least point out some of the forces which bring out from one language other

languages. And this, of course, overlaps the other part of the question, why one word can originate many different words in different languages.

Before all we have what is called *phonetic decay*, that is, words lose by and by some of their elements; especially their endings are subject to continuous wear, as, for instance, from Latin *virtutem*, we come to the Italian *virtute*, then *virtude*, then *virtue*, then *virtú*. But this phonetic decay, remember, is not a reason of the change of languages; it is simply the statement of a fact. We say that words are consumed by phonetic decay, as stones are consumed by wear and tear, by being rolled and rubbed together by the unceasing stream. Still, the question remains: why such phonetic decay brings about such different results with different peoples?

Once they used to explain the change of one word into another as an effect of the love of *euphony*. Euphony is a very elastic word. What is euphonic for one people, is not for others.

Greek bears the reputation of being one of

the most euphonic languages in the world. Still, I remember one evening I heard a Greek declaim before an audience, who knew no Greek, a scene from Sophocles, the most graceful of the Attic writers, and the audience, so far from finding it euphonious, could hardly refrain from laughing when they heard "*ió, moi moi, e e, io io papai, tòn agathòn, chrusòn,*" etc.

Euphony can not explain, satisfactorily, any of the phonetic laws that govern the transformation of languages. Another explanation first given by Max Müller is almost universally accepted. Max Müller says that every man tries to avoid, as much as he can, muscular exertion in speaking, not less than in any other of his doings. Hence a tendency to simplify words, to suppress their parts which are of less importance, to suppress or modify those sounds that are harsh and therefore call out from our organs of speech a great effort. Thus, he says, *laziness* is the general principle that explains the changes of languages. This theory is scarcely quite satisfactory. That a tendency to economize force and time (if not real laziness) exists in language as in every human calling, no one

will deny. But this will not account for a great many facts which still are undeniable. If the French say *ami, bonté, vertu, sûr, lait, fait*, instead of *amigo, bontad, virtud, seguro, leche, hecho*, must we conclude that French shows more laziness than Spanish? When a primitive *p* (compare *puter* in Latin) is reflected in English by *f*, (*father*), can we say that this is brought about by laziness? There are thousands of instances, such as these, where the theory of laziness can not account for the change.

How, then, do we explain these changes? Let us look at some facts that happen every day around us. Very often, we hear Frenchmen who try to say *the*, but don't succeed; they simply say *ze* or *de*, and it is no matter of laziness generally; the harder they try, the worse the result. Likewise, it is not the effect of laziness, if a German, instead of *judge*, says *chutche*. What do these facts mean? They mean, if any thing, that French and Germans have a difficulty in pronouncing certain sounds, which to English speaking people are natural and easy; and they exert themselves, in their pronunciation, to adapt those sounds to the particular

disposition or nature of their organs of speech. There is, as we have observed already, a real, although almost imperceptible difference, in the pronunciation of any two men who speak the same language even from their childhood. Such differences grow more distinct if we go from one province to another; very remarkable if we go from one people to another. Now as the Roman dialect was brought to bear upon and really to crush out of Spain and France and Italy the languages formerly there spoken, suppose the English language were brought in the same way into some province of France. What would happen? If it had power enough and were upheld by favorable circumstances, as Latin was, very likely the English language would supplant the dialect that is spoken in that province at present. But what kind of English? The people, in accepting the new language, would react upon it, would adapt its sounds to the capabilities of their organs of speech (capabilities mainly resulting from education and hereditary tendencies) and its phrases to their particular genius. For instance *th* would become *d* or *z*; many an *n* would become

strongly nasal; many sounds, especially of vowels, which in English are quite indistinct, would become broader and more distinct. In fact, by and by, English in that province would undergo a change not less noticeable than that which Latin has undergone.

Suppose the same English language should, in some way, come to be spoken by some Spanish province; for instance in South America. Analogous changes would be wrought in the English there spoken, and the result would not be a language identical with that brought about in the French province, but another, peculiarly moulded according to the nature of the vocal organs and the genius of the Spanish people.

Now suppose another case. A tribe, for instance, of Swedes, emigrate and go far, far away to some little island in the other hemisphere. Suppose that for centuries they are cut off from any communication with either Europe or America. What would happen? Of course, these people, especially if they find in the island some other people and mingle with them, will change their way of

living, of eating and of drinking; even their physical features will be strongly modified. But together with these, no less important changes would take place in their language. If they have no writing, no press—which are the greatest help to check the continual mutability of languages—it is obvious that after a few generations, their language will have undergone modifications so deep as to be no longer intelligible to the people they left in the old country.

Now, in all the cases considered, whether a new language is, so to speak, imported among a people, or is brought about by the people itself, the changes of the language are due either to differences already existing, or to changes which the people have undergone. In other words, we may say that changes in language are due to *ethnological adaptation*, taking the term ethnological in its widest meaning as referring not only to differences of race, but to all the geographical, historical and climatic modifications which, in the end, through the action of heredity, bring about also a difference in the race.

Ethnological adaptation, in my opinion, explains the changes of languages better than the theory of laziness. Of course, I repeat, I don't mean to say that laziness, or rather economy of time and strength, has nothing to do with the changing of languages. It *has* a great deal to do therewith. But I think that this principle is not sufficient to explain entirely such changes, and that even where the principle of laziness is evidently in action, still its working is subject to the other and broader principle of ethnological adaptation. It happens with language as it happens with the flora and fauna of a vast country; in each province they undergo some changes according to the position, the configuration, and the climatic conditions of that province. Again, it happens with language as it happens with political institutions, with mythology, with religion, with music. The same religion, with a people naturally sensual and worldly, will fall very soon into a mere system of superstitious believings and a certain routine of mechanical performances; while with a people naturally austere and earnest, it will long retain its whole purity and sanctity.

Mythology, which is brilliant, gay and poetic with one branch of people, becomes gloomy, fierce and stern with another branch of the same family.

Look at music, which is so near to language ; how it is altered, how it changes from people to people. The traveler who crosses the Alps in Italy listens there to many a song which he has heard before in Naples ; but how changed ! In Naples, they were, if I may say so, like fireworks of notes and trills, gay, vivacious, sparkling as champagne, brilliant as the Neapolitan sky. In the Alps, among the dark valleys, beneath the majestic peaks, those songs have become long, drawling *cantilènes*, whence the old brilliancy has disappeared, but where there is a deep solemn melancholy charm, quite in keeping with the surrounding scenery. The same influences which bear upon the religion, the mythology, the social customs, the music of a people, bear also on their language.

Nowadays great changes in languages are very slow and one might wonder why in the past they have been more rapid and

of greater significance. We must take into consideration the great forces which now are working for the preservation of language, which of old were not even dreamed of. To-day peoples are in close communication, even when their countries lie at wide distances from each other. It is easier to-day to go from America to any part of Europe and come back, than it was, during the middle ages, to go half way from Paris to Rome. And naturally the frequent intercourse of peoples who speak the same language does much for its maintenance. But the most important agents for the preservation of language are writing and the press, aided by a diffusion of common education. All our tendencies to depart in conversation from the standard language are held in check by our writing, and by the language we read every day in papers and books. The cow boy, who, left alone for years and years, would develop God knows what kind of dialect, can learn to spell and pronounce as correctly as any child in Boston or London, if he has books and a school within his reach.

It is just the same as with music. If a song

is not printed, its air will soon change remarkably in passing from country to country ; but once its notes are printed, you may be sure it will be sung all over the world with more or less elegance, but with the same air.

The art of printing has received much praise, and doubtless deserves it well. But few have observed the great service that the press renders to language. Without the press the changes in language would have gone so far that the modern dialects of Europe would be, even in the same nation, more different one from the other, than French is from English, or German from Italian. In other words, the intercourse of men would have become more and more a difficulty ; civilization would have met in its way a great and terrible barrier. Without a press very likely America and England to-day would not understand each other.

III.

THE ENGLISH LANGUAGE.

WE have seen in the last chapter what the Indo-European family of languages is. Two of its seven branches are the Germanic, or Teutonic, and the Latin. The English language belongs properly to the Teutonic branch, but, through historical circumstances, so much Latin blood, as it were, has been infused into its body, that it is impossible to study it with a view only to its Teutonic elements. It is indispensable to take into consideration the Latin branch also.

In the English language we find German words, Italian, French, Greek, Spanish, Latin, Portuguese, Chinese, Turkish, Arabic, and, in fact, words from almost all the most important languages of the world. But, while the others may be considered as merely adventitious elements, Anglo-Saxon and Latin constitute the

real body of the language. Of these two, Anglo-Saxon is by far the stronger and the more important. The grammar (that little of it which has been preserved in the English language) is pure Anglo-Saxon ; of the vocabulary, the most familiar terms, the most important, those, in short, without which no language can subsist, are Anglo-Saxon. Still a great treasure of words has been poured into the English language from Latin. About *five-sevenths* of the English vocabulary, comprehending almost all terms connected with literature, art, science and in general all the intellectual and political life of English speaking peoples, are Latin. Of these Latin words, some have been derived *directly* from Latin, but the large majority *through a French channel* by means of the Normans. Sometimes a Latin word was, or still is, used side by side with the corresponding Anglo-Saxon word. Sometimes from Latin words other words are formed by means of Anglo-Saxon suffixes ; sometimes an Anglo-Saxon word has been modified and propagated with formative elements taken from the Latin language.

-*Y*, -*ly*, -*ness*, -*ful*, -*less*, -*ship*, -*hood*, are among the most important Anglo-Saxon suffixes; -*able*, -*ible*, -*ous*, -*ile*, -*ance*, -*ence*, -*tion*, are Latin suffixes. *Honor*, *honorable*, *honorableness*; *love*, *lovable*, *loveableness*; *use*, *useful*, *usefulness*; *charity*, *charitable*, *charitableness*; *plenty*, *plentiful*; *sober*, *sobriety*, *soberness*; *motion*, *motionless*; *direct*, *direction*, *directly*; *amiable*, *amiability*, are a few specimens of the way in which Anglo-Saxon and Latin are interwoven in the English language.

J. R. Lowell said that we lay Latin bricks with the strong mortar of the Anglo-Saxon language. The simile is at once witty and true; and the result of such building is this marvelous structure which we call the English language. If we analyze the nature of the bulk of English language, we find either: 1st, a pure *Anglo-Saxon* word, both in its root and affixes; for instance, *love-ly*, *love-li-ness*, *trust-worthy*, *trust-ful*;—2d, or an *Anglo-Saxon* word with *Latin* formative elements: *lov-able*, *read-able*;—3d, or a *Latin* word with *Latin* formative elements: *ami-able*, *correspond-ence*, *confid-ence*, *con-*

sider-able, etc. ; 4th, or of *Latin* words with *Anglo-Saxon* formative elements, *sauc-y*, *sauc-i-ly*, *plenti-ful*, *honorable-ness*, etc. It must also be noticed that many times we have a Latin word side by side with its Anglo-Saxon correspondent : *prison* and *jail* ; *convention* and *meeting* ; *congregation* and *flock* ; *pastor* and *shepherd* ; *country* and *land* ; *strength* and *force* ; etc.

Very often we have some formations from an Anglo-Saxon root, and then other formations from the corresponding Latin root—corresponding in the meaning, of course. From *trust*, we have *trust*, to *trust*, *trusty*, *trust-worthy*, *trustful*, *trustfulness*, *untrustful*, *un-trustfulness*, *trustworthiness*, etc. Moreover, we have many words formed from the Latin root *fid*, which means also to *trust*—*confident*, *confidence*, to *confide*, *diffident*, *diffidence*, *perfidy*, *perfidious*, *perfidiousness*. The same thing happens with the verb *pour* and the Latin root *fud*, which has the same meaning : to *pour*, *pouring* ; *infuse*, *infusion* ; *effusion*, *effusive*, *effusiveness*, *confusion*, etc.

This interweaving of Latin and Anglo-Saxon

elements is the most striking peculiarity of the English language. It is this which makes of English the greatest, the strongest, the richest language in the world, at once adapted to a swift, lucid expression of the homeliest conceptions, as well as to the clear, forcible conveyance of the highest scientific thought and of social and political speculations ; of poetic feeling as well as of commercial and industrial ideas.

From this brief review of the constitution of the English language, the great advantage appears of a knowledge, at least elementary, of Anglo-Saxon and Latin. Not that he who knows Anglo-Saxon and Latin, will be, simply because of that, a powerful writer or an elegant speaker. That depends on so many mental and moral qualities that to ascribe it to the knowledge of some dead languages would be simply ridiculous. But he who knows Anglo-Saxon and Latin may be sure to have a great advantage in mastering the English language ; which is no little reward to his fatigue.

When then we come to look for the etymology of an English word, in nine cases out of

ten we must look either to Anglo-Saxon or Latin. Some sounds point more toward one language than toward the other—*t/h* for instance, indicates the Teutonic origin of the word—but only a considerable amount of Anglo-Saxon and Latin lore will lead us with some certainty in our researches. When we have reached a Latin or an Anglo-Saxon word, then we can follow it further back, even to its Indo-European root, which is the furthest point we can hope to reach.

As for words derived from Latin, we must take notice of a very important fact. The majority of English words of Latin origin came into English through a French channel; therefore they have undergone those changes which Latin words undergo when they become French. On the other hand some Latin words, generally literary, ecclesiastical, or scientific have been transplanted directly from Latin into English, without any Gallic modification. In looking, then, into the structure of words of Latin origin we must always bear in mind the phonetic laws prevailing in the French language, and especially the fact that a

Latin consonant between two vowels, tends, in French, to disappear. We have, for instance, the words *sure*, and *secure*, with their derivatives *surety*, and *security*, to *assure*, to *insure*, etc. Both these words are from Latin *securus*, but *sure* came through the French channel, where the consonant between the two vowels (*c*) has disappeared, while *secure* came directly from Latin, without any French influence.

Latin *securus* is a compound word ; the prefix *se* means *out*, apart ; *cura* means *care*, trouble ; hence *secure* or *sure*, “ out of trouble.” This same *se* we have, for instance, in *se-lection*, from the root *leg*, and the suffix *tion*. *Leg* means to pick, to gather ; hence *selection*, to select, to pick out. In the same way *secession* from the verb *ced*, to go, and *se*, to go apart. This same verb *ced*, we have in the compounds, to *recede*, to *secede*, to *precede*, to go before (*præ*, before,) to *succeed*, to “ go under,” “ in the place of ” another, to *proceed*, and all the derivatives : *recession*, *recedent*, *precedent*, *precedence*, *procession*, *intercedent*, *success*, etc.

Let us take the words *rule* and *regulation*.

Their meaning is very akin. Both were from the Latin root *reg*, to direct. From *reg* we have *regula*, and the Latin *regulatio*. *Regula*, through loss of the middle consonant, gives normally *rule*. In modern French the form *règle*, with the guttural (*g*) preserved, came to be only used, but in old French we meet such forms as *riule* and *reule*. *Regulation* came to English directly and its middle consonant was preserved, because it was not submitted, so to speak, to the French grinding mill.

The words "*decree*" and "*decretal*" are both to be referred to a Latin *decretum*, *decree*. *Decretum* is composed from the prefix *de*, the root *cre*, and the suffix of the past, *tum*. *Cre* means to *sift*; we have it in the form *cri*, in the noun *cri-brum*, sieve; *-brum* is very often employed to denote an instrument or a place (for instance *delu-brum*, a place of purification, a sanctuary; *candela-brum*, a candlestick). We have the same root in Greek, *kri*. Both in Latin and Greek from its primitive material meaning of sifting, it came to mean, very naturally, to select, to examine. From this root, we have the words *cri-tic*, *criticism*, etc.

Critic then is properly "he who sifts," he who examines. This root, with the prefix *de*, which means *out, about*, means "to sift out," to pick out after examination. Hence *decretum* is that which has been "sifted out," the conclusion which has been reached. *Decretum*, with the usual disappearance of the consonant between two vowels, has given in French *decret* where the *t* is not pronounced; and in English *decree*. But other words, less common, as *decretal, decretory*, came straight from Latin, with their middle consonant preserved. This is very often the case with literary or scientific words, which in the main are taken from Latin or Greek with a slight modification of their ending, and without undergoing those changes which we find in words that are thoroughly popular. When the people accept foreign words, they apply to them, as by instinct, those phonetic laws that govern their own language. In a certain sense they *nationalize* them.

In the same way, from Latin, *obædirc*, which properly meant, to "listen to," we have French *obéir* and English "obey," in

which the *d*, already wanting in French, has left no trace, and the ending has been fashioned according to the genius of the English language, or to be more exact, in analogy with the ending of many other English verbs. But in French, we have *obéissance*, *obéissant*, while the Latin *d* has been preserved in the corresponding English, *obedience*, *obedient*.

We would not be correct, however, were we to assume that all the English words which preserve certain consonants that in the corresponding French words have disappeared, came directly into English from Latin. Not a few of them came through the French channel, but at a time when the Latin consonant was still preserved in French. This consonant remained afterward in English, while in French it subsequently disappeared. Thus, we know, for instance, that *obéissance* was once in French *obédissance*.

This fact, that Latin words sometimes do not undergo all the changes that generally are observed in the evolutions of Latin words into French or English, gives rise to the so-called *doublets*. *Doublets* are words which,

although clad in a different garment, so to speak, are etymologically one and the same word. Thus, for instance, the Latin *amicabilis* gives rise to the doublets *amiable* and *amicable*, which are properly the same word, with this difference, that in *amiable* we have the usual loss of the consonant between two vowels, (*c*), while this consonant is preserved in *amicable*. *Aptitude* is the doublet of *attitude*, from Latin *aptitudo*.

The Latin sound *ca* is generally represented by *cha* in French, and in the English words derived from Latin through French; for instance *calorem* gives *chaleur*, heat; *calidus*, *caldus* (through the usual change of *al* into *au*) gives *chaud*, warm; *campus* gives *champ*, field. But sometimes this *ca* is preserved; which explains such doublets as *cavalry* and *chivalry*; *channel* and *canal*; *chariot* and *cart*; *chateau* and *castle* (Latin *castellum*); to *chant* and *cant*, etc.

Other instances of doublets are: envious and invidious; due and debt: fact and feat; fragile and frail; guard and ward; major and mayor; mister and master; naïve and native; pause and pose; poor and pauper; preach and

predicate; prosecute and pursue; regal and royal; supplicant and suppliant; vocal and vowel.

Let us end this chapter with some other etymological researches. I hope they will not prove very dull, and will help us to see more into the nature of this organ without which man and all man's faculties would be powerless. Let us resume the same root *cre* or *cri*, which we have just fallen in with above. This root *cre* we have also in the form *cer*. This phenomenon of the transposition of a vowel, or of a consonant, especially when such consonant is *r* or *l*, is very common, and it is called *metathesis*. From this root, either in its form *cer* or *cre*, we have many words; for instance, *cer-tain*, Latin *cer-tus*, is that which has been sifted, that of which we are sure after careful investigation. *Criterion* is a Greek word, formed by the aid of the suffix *-terion*, that is used to denote a place or an instrument; it means that by which we judge, we "sift" something to find out what it is worth. From this root *cer* with the re-enforcement of an *n*, very common in Latin and Greek, we have the

verb *cer-n-o*. This *n* disappears in the past *cre-vi*, *cre-tum*. *Cer-n-o* means, of course, "to sift." From this we have to *discern*, to pick out, to see among other things. And from the past of *discerno* we have "*discreet*," which means, properly, "sifted out," "selected," "examined"; and in an active sense, "wary," "discriminating," "prudent." From "*discreet*" we have "*discretion*."

The same phenomenon of re-enforcement through an *n*, and of metathesis, we have in another root, which is at the basis of many words. The root *star* or *ster* means to "strew." This very English verb is from the same root. From *ster* we have, through a common suffix, *-ula*, the word *ster-ula*, which through the form *sterla*, has given "*stella*," and means "strewer of light," a *star*. The same root gives the Latin verb *ster-n-o* to strew, which makes in the past participle *stra-tum*, plural *stra-ta*. Hence the Italian *strada* and the English *street*, which means properly *strewn*. From the same root we have *pro-stra-te*, to throw down, to strew; and *prostration*; *con-ster-n-ate* and *consternation*, etc. So we see that one and the same root

gives rise to so different words as *star*, *street*, and *consternation*.

Who would say that there is the least connection between *noun* and *agnosticism*? Still, beyond a doubt, these words are sisters, or cousins at least, and they come from the same root. We have an Indo-European root *gan* or *gna*, which means to "know." From this we have the Sanskrit word *na-man* for *gna-man*, "na-me"; the Greek *gno-sis*, knowledge; the Latin *co-gno-sco*, to know, *no-men* for *gno-men*, noun; the English *know* and *noun* and *name*. And other words still; for instance, *noble* is in Latin *no-bilis* for *gno-bilis*, which meant "worthy of being known," "distinguished." So *igno-ble*, *no-table*, *no-te*, *no-tice*, *igno-re*, *igno-rant*, *co-gnizance* (Latin *co-noscentia*) *recognizance*, etc., are all to be referred to that root *gna*. Now as to *agnosticism*, it is a Greek word; from *gno-sis*, knowledge, we have *gnostic*, he who knows, as from *crisis*, *critic*. *A* in Greek means *not*; *agnostic*, "he who does not know"; *agnosticism* is the state of mind of the agnostic.

There is a deep meaning in this common descent of the words *noun*, *name* and *know*

from the same root. To give a thing its right name is to *know* it; we can not *name* it correctly without *knowing* it. So in our words we treasure up all the results of human knowledge. The only trouble is, that we are too often satisfied with repeating the words we have learned in books or heard from other people, and we are too easily deceived into believing that we know the things when we scarcely know the true meaning of the words we use. Just as physicians often believe they know what a disease is because they know its Greek name.

What do we mean when we say "I have not the least *idea* of such a thing?" *Idea* is really a Greek word, which means an *image*. The idea of a thing is properly the image we have of that thing in our minds. The Greek word *idea* is derived from a root *vid*, which means to *see*; in the Greek *v* has disappeared. We have this same root in Latin: *vid-ere*, Greek *id-ein*, to see. From this root we have in Greek *eidolon*, an image, English *idol*; and *eidullon*, English *idyl*, a little *picture* from life. We have in Latin *vi-sio*, English,

vision, from *vid-sio*; as we have seen (occa-sion, etc.) *d* disappears before *s*. We have also seen that *d* before *t* is changed into *s*; thus, if to the root *id*, we add the suffix *tor* (comp. protec-tor, progeni-tor, etc.) we shall have *is-tor*, he who sees, "seer," and *istoria* is the tale of him who has seen. *Istoria* has given in English, "history."

We have some other familiar words, which, in spite of appearances, are far distant from *idea*, both as to meaning and root: the words *idiot*, *idiotic*, *idiotism*. All these words come from the Greek word *idios* which means "one's own," private. *Idiotes* in Greek designated a citizen who did not partake in the government of the city, a merely private citizen. Hence it came to denote one belonging to the lowest rank of citizens; hence its present meaning. *Idiom* is what is proper, particular to one language.

A very instructive word is *age*. *Age* was in old French *edage*, and then through the usual disappearance of the middle consonant, *eage*. *Edage* comes from Latin *aetaticum*. (The suffix *aticum* gives usually *age* in French: *stage*

is to be referred to a *staticum*; *voyage*, which once was *viage*, comes from *viaticum*, and this from *via*, a way, a journey.) *Aetaticum* is from *aetas* age, which is an abbreviation of *aevitas*: compare *fo-mentum* from *fovi-mentum*, *momen-tum* from *movimentum*, etc. *Aevitas* is from *aevum*, time; from *aevum* we have *aeviternus*, which, as *aevitas* to *aetas*, was reduced to *aeternus*, “lasting,” “eternal.” Thus *age* and *eternal* descend from the same word *aevum*, time.

Another very common word is *emphatic*;—“I deny it *emphatically*.” This is a Greek word, “*emphaticòs*,” from the root *pha* of the verb *pha-i-no*, which means to “*shine*.” As *gnosis* from *gno*, we have *phasis*, phase, from *pha*; the *phases* of the moon are the various succeeding ways in which the moon seems to shine. “*Emphaticos*” in Greek means properly “*shining*,” “*conspicuous*.” We have slightly modified this meaning: but our modification consists simply in this, that we apply to the mind what once was applied to the eyes.

From this same verb *phaino* we have the word *phenomenon* which is properly the pres-

ent participle of the verb *phaino*, and means "*that which appears*," but outside of scientific language we reserve the word only to things which do not appear usually, but are rather uncommon.

I have mentioned the word *con-spic-uous*. Here we have a root which has a wonderful proliferation. The root, *spec*, means properly "to look." Hence we have a great many words, like *specula*, observatory, and *speculate*, properly to look out from a *specula*, to contemplate. To *prospect*, to look forth; to *inspect*, to look in, inspector, inspection; *despise*, through French modification, to look down; *despicable*, to be looked down; *despite*, the act of looking down.

Now, to sum up, we have seen many instances of the march of words, of the development of their ideal meanings from the material meaning of their roots. Besides, we have seen that, in the classification of languages made by the comparative philologist, there is a great family, the so-called Indo-European, or Aryan family, to which the greatest part of the languages spoken by the most civilized peoples in Asia,

Europe, and America belong. The English language belongs to this family, and properly to its Teutonic branch, but has also taken a great deal of sinew and blood from Latin source. Therefore, if we take an English word, we can follow it backward to that primitive language which was spoken by our forefathers in the high plains of Asia, before they separated, and spread all over Asia, Europe, and America. Thus it is that in every word we have not only roots and suffixes, but important fragments of the history of our own race.

And here let us make a little digression. You know that many people who attempt etymologies, without caring to inquire whether there is a science of language or not, have the hobby of continually referring words to Hebrew, and pretend to find in this language the key to explain not only English, but many other languages. Still, as you have seen, we have examined many words, and Hebrew we did not even mention. There are indeed very few words in all Indo-European languages whose origin is to be sought in the Hebrew;

and those are mainly religious words, like Sabbath, Pasch, etc. What do we do then with Hebrew? Must we do away with it entirely?

Hebrew belongs to another family of languages, with which our Aryan tongues have little to do. By the same process with which the comparative philologist has classified the Aryan languages, he has also established another family, the *Semitic*, to which Hebrew belongs. This family is divided into three branches:

1. *Arabic*, or southern branch.
2. *Hebrew*, or middle branch.
3. *Aramaic*, or northern branch.

Jesus Christ spoke an Aramaic dialect.

The Aryan and the Semitic family differ widely both in their grammar and dictionary. The attempts repeatedly made by eminent philologists to explain their discrepancies and show some connection between them have thus far failed.

Beside the Aryan and the Semitic, there are hundreds and hundreds of other languages, some of which are spoken by large nations, like the Chinese, some by a single tribe in the

lowest degree of humanity. For comparative philology these languages are not less important than the Aryan and the Semitic. Many phenomena of the development of language are more easily discovered and more clearly observed in rudimentary languages than in those which have reached a higher degree of life. This study is carried on most actively by missionaries and scientists: but the materials gathered thus far are not large enough to allow a satisfactory classification. Some philologists divide the languages, outside of the Semitic and Aryan families, into about a hundred groups; some in another number. But it is self-evident that, for the present, classification is premature.

Just to give the reader a mere hint, we can hardly say an idea, about the classification of such languages, we may mention the following groups :

A. The *Scythian* group, which comprehends : 1. Hungarian ; 2. Turkish ; 3. Finnish and Lappish ; 4. The Samoyed dialects ; 5. Mongolian dialects ; Tungusian dialects.

B. I. The Dravidian or Tamulic (including

Tamul, Telegu, Malabar, Canaries). II. The languages of North-Eastern Asia. III. Japanese. IV. Malay-Polynesian. V. The Caucasian dialects (Georgian, etc).

C. South African dialects.

D. I. Chinese. II. The languages of Farther India (the Siamese, Burmese, Annamese, etc). III. Thibetan.

E. I. Basque. II. The Aboriginal languages of South America.

Before proceeding to examine other interesting results of the Science of Language, especially concerning grammar, mythology and ethnology, let us analyze some more words of the English language, dividing them into groups marked by some connection of ideas. We may begin with some of the most important household words; then we shall investigate into the origin of church, social and political words.

HOUSEHOLD WORDS.

Even for these words which we have been so accustomed to hear ever since the first days of our existence, and which we are fain to accept as *natural* words, never fancying where they may come from—even for these words, we can almost always hunt out a remote origin, and the reason of their present meaning.

Before all, *house*, German *haus*, Gothic *husa*, is to be traced to a root *sku*, which means to “cover,” to “shelter,” (of the disappearance of an initial *s*, we have numerous instances). The Romans and Greeks had the words *domus* and *domos*, from a root *dam* which means to *build*, and also to “*bind*.” From *domus* we have *domestic*, *domesticity*.

The word *family*, French *famille*, Latin *familia*, is from a root *dha* which means to *settle*, to *order*. The change from *dh* to *f* is according to the phonetic laws.

Father, German *vater*, Frisian *feder*, Anglo-Saxon *faether*, Gothic *fadar*, corresponds normally, according to Grimm's law, to Latin *pater*, Greek *patèr*, Sanskrit *pitar*. In all these words, we have, more or less preserved, the suffix *-ter* which usually denotes the agent, and the root *pa* which means to "guard," to "protect," and also to "support." Father, "he who supports," who "protects." *Mother*, German *mutter*, Old High German *muotar*, Latin *mater*, Greek *meter*, Sanskrit *mâtâ*, has the same suffix *ter*, and the root *ma* which means "to shape," "to form"; "she who shapes," "who forms," the family. This root has also the meaning of "procreating," which is fit for our case.

Son and Daughter. *Son*, Anglo-Saxon *sunu*, Sanskrit *sunus*, are derived from the root *su*, which means to generate: hence *son*, "the generated one." We may observe in passing that this *son* helps to form many family names: Johnson (the son of John), Jackson (the son of Jack), Peterson (Peter), Dickson (Dick), Nelson (the son of Nel), etc.

In *daughter*, German *tochter*, Greek *thugatér*, Anglo-Saxon *dohtor*, Sanskrit *duhitâ*, we have

the usual suffix *ter* and the root *duh*, which means to *milk*. Very likely the young girl was called by this name when on the high plains of Asia our ancient forefathers, in their pastoral life, used to send her to milk the cows. Other philologists see in daughter (*duhitā*) the meaning of “giving milk,” of “sucking.” Latin has for *son* and *daughter* the words *filius* and *filia*; hence the French *fil*s and *fil*le, Italian *figlio* and *figlia* and Spanish *hijo*, *hija*. (Remember *hecho* from *fecho*, *hierro* from *ferrum*.) The root in this case is *bhu*, which means also “to generate.”

Brother and Sister. *Brother*, German *bruder*, Old High German *pruodar*, Latin *frater*, Greek *fratōr*, Sanskrit *bhrātar*, is derived from the root *bhar*, which means to “carry,” to “support,” to “guide.” *Brother*, the support, the guide of the sister. *Sister*, German *schwester*, Anglo-Saxon *soustar*, Gothic *svistar*, Sanskrit *svasār*. This *svasar* has to be reconstructed into *svastar* (compare Gothic *svistar*) from the root *vas*, to “live,” to “inhabit.” *Sister*, “the woman who lives under the same roof,” “our companion.”

Husband and wife. Husband is properly a Scandinavian word, and means the master of the home (*hus* for house). The origin of *wife* is as yet obscure.

The origin of *bride*, Anglo-Saxon *bryd*, Old High German *prut*, German *braut*, like that of *wife*, thus far is not ascertained. The second part of *bridegroom* has nothing to do with *groom*; it was once written "bredgome," Anglo-Saxon *brydguma*, Swedish *brudgumme*, Old High German *brutegomo*, German *bräutigam*. The word *gome*, Anglo-Saxon *guma*, means *man*, and is cognate with Latin *homo*. *Bridegroom* means the man of the bride; the man newly married. We may observe in passing that *guma* and *homo*, "man," are to be referred, according to phonetic laws well established, to *gham*, which means "earth," (compare Latin *humus*, the soil). The word *man*, on the contrary, is from a root which means "to think."

Spouse, Middle English *spuse*, French once *espoux* and *espouse*, now *époux* and *épouse*, Italian *sposo* and *sposa*, are from *sponsus*, pledged, betrothed, the past participle of the verb *spondere*, to promise, to pledge. *Wedding*

is from the Anglo-Saxon *wed*, to pledge. *Nuptial* is from Latin *nub-ere*, which meant properly to *veil*; the bride in Rome was covered with a yellow veil.

Bachelor, Middle English *bachelor*, Old French *bachelor*, French *bachelier* is from *baccalarius*, a farm-servant, a cow-herd: from *baccalia*, a herd of cows; this from *bacca*, a cow, a Low Latin form for *vacca*, a cow.

To marry, French *marier*, Italian *maritare*, is from Latin *maritus*, husband. *Maritus* is connected with *mas*, *maris*, "male."

CHURCH WORDS.

Church is in Middle English *chirche*, *chireche*, *cherche* ; Northern dialects *kirk*, *kirke* ; Anglo-Saxon *kerika*, *kirika*. These are to be referred to the Greek *kyriakos*, which means "belonging to the Lord" ; *Kyrios* is the Lord. *Church* then properly means "the house of the Lord."

In the Greek there is another word for *church* ; *ecclesia*, from the verb *caleo*, to call, to summon ; that is "the assembly of the faithful." From this word we have "ecclesiastic," "ecclesiastical."

Clergy is from Latin *clericus*, Greek *klericos*. This from *cleros*, which meant "a portion," "an allotment." The priests were called *klericoi*, either because they were, so to speak, a class apart, or rather because they had "a lot in God's inheritance." And when only the churchmen knew how to read and write,

clericus, *clerk*, became synonymous with *scholar*. The word "clerk," then, once conveyed an idea of dignity, which gradually disappeared with the increasing diffusion of education.

Priest, Middle English *preest*, Anglo-Saxon *preost*, Old French *prestre*, is a contraction from the Latin *presbyter*, Greek *presbyteros*, which means properly "elder." In the early days of the church, the *eldest* were commonly selected to lead in the service of the church.

Deacon, Latin *diaconus*, Greek *diaconos*, means "a servant," a subordinate of the priest.

Congregation is from the Latin word *greg-em*, which means *flock*. *Pastor* means *shepherd*. So when we speak of "a pastor and his congregation," we use exactly the same metaphor as when we call him "a shepherd," and we speak of his "flock."

Preacher, to *preach*, etc. (Middle English, *prechen*, Old French, *precher*), are from Latin *prae*, "before," before men, in public; and *dicare* to proclaim, connected with *dicere* to say. *Praedicare*, through the usual loss of the

dental between two vowels, gives *præicare*, from which we have normally the Old French *precher*. *Predicate* is from the same root.

Rite is from the Latin *ritus*, a custom, especially in religious matters. In Sanskrit we have *riti*, a "going," also "way," "usage"; root *ri*, "to go." From *ritus* we have *ritual*, *ritualism*, etc.

Liturgy is from Greek *leitourgia*, from *leitós*, public, *ergon*, work, service; "the common service" in church.

Layman, *laic*, Old French *lai*, Latin *laicus*, Greek *laikos*, from *laos*, the people; "pertaining to the people;" "one of the people at large," "who does not belong to the caste of the priests."

Profane, Latin *profanus*, from *pro*, before, and *fanum*, temple; "he who did not enter or was not admitted into the church."

To *profess*, is from *pro*, before, and the past *fessus* of the Latin verb *fateri*, to avow, to acknowledge; to "acknowledge before all," publicly.

Cemetery is the Greek *koimeterion*, from the verb *koimao*, "to sleep," "to rest," and the

suffix *terion*, which denotes either an instrument or a place. Hence *cemetery*, "the place to rest, to sleep." *Koimao* is allied with *keimai*; root *kei*, from *ki*, "to repose," "to rest"; and this root is connected with the Latin *quies*, and our *quiet*.

Mortal, *immortal*, etc., are all to be referred to a root *mar*, to "grind down," to "pound," to bruise to death.

Soul, Anglo-Saxon *sawel* and *sawol*, Gothic *saiwala* from *saiws*, "sea," from a root *su*, to "stir," to "toss about." It is not unnatural to compare our inner nature, tossed by passions and desires, with a sea stirred up by the gales.

The Latin *anima*, soul, from which we have "animal," "animate," "animation," etc., meant properly "breath," from a root *an*, "to breathe." *Anemos* in Greek means *wind*.

Spirit is also from Latin *spirare*, to "breathe." To the primitive man "breathing" was the most important, the most striking manifestation of life.

Paradise meant, originally, a garden, a park, a pleasure ground; Greek, *parádeisos*.

Hell is connected with *hole*, from the Teu-

tonic root *hal*, to hide, to conceal. *Infernal* (French, *enfer*,) is a Latin word, connected with *inferior*, and means properly *low*, "subterranean."

Angel is properly a "messenger" of God. It is from the Greek *angelos*, "a messenger."

Gospel is in French *Evangile*, Italian *evangelio* or *vangelo*, from Greek *eu*, "well, good," and *angelion*, "news." *Gospel* was once written *God-spel*, the *spel*, the story, the narrative of God. *

God is not less mysterious in its etymology than in any other predicate. The connection between *God* and *good*, which has been suggested, has no linguistic argument in its support. In Latin we have *Deus*, whence French *Dieu*, Italian *Dio*. *Deus* for *devus*, Sanskrit *déva*, is from the root *div*, "to shine."

Deity, *divine* and *divinity* belong to this same root.

* But see *Analysis of the word "Gospel,"* p. 80 of *A Vindication of the Hymn Te Deum Laudamus*, etc. by Ebenezer Thomson, Esq. London: John Russell Smith, 1858.

WORDS OF SOCIETY.

Of course it is impossible to gather here, without transcending by far the limits of the present work, all the words which could be grouped under this heading. We shall select only a few of them. First, the word *society* itself has a clear etymology. We have in Latin *societas*, in French *société*, which are formed from *socius*, an associate. The root is *soc*, which is but a doublet of *sec* or *secu*, from the Indo-European *sak* "to follow." *Socius* is "he who follows another," a "companion." Society, then, means "companionship," "communion of life." *Social*, *sociality*, *sociable*, *socialism*, etc., belong, of course, to the same root.

We may divide the social relations into two great groups, relations of *sympathy* and relations of *antipathy*. *Sympathy* and *antipathy* are both Greek words from the root *path*, to feel. *Sym-*

pathy (*sun*, with) to feel with somebody, to feel as he does, to sympathize with him; *antipathy* (*anti*, against) to feel against him, aversion to him. (*Aversion*, by the way, is from the Latin *a*, away, from, and the root *vert*, of the verb *vertere*, to turn.) Words of sympathy: love, friendship, affection, amiability, etc.

Love, Anglo-Saxon *lufu*, Sanskrit *lobha*, is from a root *lubh* which means to *covet*, to *desire*. This root has in Latin the form *lib*, hence *liber* which means *free*, originally “acting at pleasure”; and *liberty*, and *liberal*. *Amour*, *amorous*, *amatory*, *amiable*, *amiability*, etc., come from Latin, *am-or*, love. So *friend* is in Latin *amicus*, whence Italian, *amico*, Spanish *amigo*, French *ami*.

Friend (friendly, friendship, etc.,) was in Anglo-Saxon *freond*, which was originally a present participle of *freōn*, *freōzan*, to love; *freōnd*, then, means “loving.” The root of *freon* corresponds to Sanskrit *pri*, to love. The *f* of the Anglo-Saxon corresponds, according to Grimm’s law, to Sanskrit *p*: compare *pancha*, five; *pitar*, father, etc.

Affection is from the preposition *ad*, at, “to-

ward," and the root *fac* of the verb *facere*. (Compare *iec* from *iac*, in-jection, pro-jection, etc.) To *affect*, then, is to act toward something or upon something; hence *affection*, "the being affected or touched"; the state of having one's feelings affected in some way; bent or disposition of mind; feeling.

Dear, Anglo-Saxon *deore*, German *theuer*, whose root is unknown, but whose primitive meaning seems to have been "*expensive*," is in Latin, *ca-rus*. From this we have to *caress*, French *caresser*, to fondle, to cherish. The verb *cherish* itself is only the English form of the French *chérir*, which comes from *carus*. We have noticed already that it is in the nature of the French language to change the Latin *ca* into *cha*: Latin *catus*, cat, French *chat*; *caminus*, *caminata*, hearth, French *cheminée*, English *chimney*; Latin *cantare*, to sing, French *chanter*. In the same way from *carus* we have *charity* and all its derivatives. Now, if we go further back, we find that Latin *cā-rus* corresponds to Sanskrit *kam-ra*, "charming," beautiful," from the root *kam*, "to love."

The verb to *court* has a long story. *Court*,

Latin *cors* or *cohors*, was said first of a yard and especially of a cattleyard, and of the cattle themselves. Then it came to be applied to the yards of palaces and people living therein, to the royal retinue and house—hence the verb “to court,” to practice arts in vogue at court, to seek favor. Hence the words *court-eous*, *court-es-an*, *court-i-er*, *court-es-y*, etc.

Words of antipathy. To *hate*, Anglo-Saxon *hete*, is very likely from a Teutonic root *hat* which means to “pursue.”

To *detest*, French *detester*, is from Latin *detest-ari*, which means to execrate, to imprecate evil by calling the Gods to witness; *de*, down, and *testari*, to testify, from *testis*, “a witness.”

Enemy and *enmity* are from Latin *in-imicus*; which is from *amicus*, friend, and *in*, not.

Rival is a very good specimen of the long way words go over in their meaning. *Rival* is a Latin word, *rivalis*, which is formed from *rivus*, a brook. *Rivalis* is one who lives, who has his possessions along a brook. Few branches of the law have been so long unsettled as the law regarding the claims of the owners of estates

when the swelling and overflowing of rivers cause not slight alterations in their lands. Naturally enough *rivalis* and *rivalitas* came to have the meaning of "contestant" and contestation"; one step further, and we have the present meaning of *rival* and *rivalry*.

Jealous, Old French *jalous*, Italian *geloso*, Spanish *zeloso*, Low Latin *zelosus*, are all from Greek *zelos*, "zeal." *Zelos* meant properly "heat," "ardor," and it stands for *zeslos* from a root *zes*, which means "to boil," "to seethe" (*zes-is*, boiling). From these meanings, it is easy to see the passage to the present meaning of *zeal* and *zealot*, *jealous* and *jealousy*.

Proceeding now to consider other words of society, we can not omit such words as *fashionable*, *elegant*, etc.

Fashionable, of course, is from *fashion*. *Fashion*, Old French, *faceon*, *fazon*, *fashon* means the shape, the make of a thing. It is from the Latin *factio*, from the verb *fac-ere*, to make. *Fashion*, then, meant properly nothing else than the "shape" in which something was made; then it was applied to dress, to manners, etc.; and one thing or person came to be called

fashionable when according to the shape or standard prevailing in society.

Elegant and *elegance* are both from the prefix *e* and the Latin root *leg*, to choose, to pick out. *Elegance* consists in "picking out," in "selecting" the best things. It is a sister-word of *e-lec-tion*, a choice, or picking out.

As for society diversions, it would be too long to enumerate them all, but let us devote some lines to at least one kind of amusement.

Theatre is a Greek word from the verb *thedo*, "to see," and the suffix *tron*, which usually denotes an instrument or a place. *Theatre* is then a "place for a sight," for a view. The same root we have in *theory*, properly a "beholding," a "speculation."

Drama means an *action*, from the Greek root *dra*, to act, to perform; and *ac-tor* is he who *acts*, who performs.

Tragedy is from the Greek *tragōdia*, from *tragos*, a he-goat; and *ōdos*, a song. In the feasts of Dionysus (Bacchus, the god of wine) a song was sung, and then a he-goat, a beast obnoxious to the vine, was sacrificed to Dionysus. The song, which was at first merely lyric,

was afterward divided into parts and sung by two men; then other and still other partakers were added, so that by and by from that rude beginning we came to have what we now call *tragedy*, whose first meaning was the "song of the he-goat."

Comedy is also a Greek word from *kōmos*, a banquet, and *ōdos*, a song. *Comedy*, signified at first songs sung at banquets; gay and festive songs. *Komos* was a banquet at which the guests lay down, from the same root that we have in the verb *koimao*, "to lie down," "to rest"; so that in *comedy* we have really the same root that we have in *cemetery*. Strange fate of words!

Farce is connected with the verb to *farce*, Latin *farc-ire*, to stuff, to cram in. *Farce*, then, meant at first "a stuffing"; and that now it does not contradict its original meaning, I think not few are ready to admit, especially after having been obliged to endure for two or three hours certain entertainments of the kind.

The origin of the word *Vaudeville* seems to be due to the town of Vaudevire (Val-de-vire)

in Normandy, where Olivier de Basselin, a poet of the fifteenth century, introduced this kind of play.

To close this chapter on words of society, let us look a moment into the titles which we prefix to our names. *Mister, meister, maister*, Old French *maistre*, are but varieties of *master*, derived, through French, with the usual loss of the middle consonant, from Latin *magister*, which meant properly "much more greater"; hence the idea of superiority, of power, of sway.

Mistress, Middle English *maistresse*, is formed from *master* through the French suffix *-esse* (Latin *-issa*, Italian *-essa*; *abb-ess*, *author-ess*, *doctor-ess*). *Miss* is simply a contraction from *Missis*, the common pronunciation of *mistress*. Shakespeare: "This is Mistress Anne Page" (*Merry Wives*, i. i. 197) where we now should say "Miss Anne Page."

Sir or *sire*, was the despair of the old etymologists. They even wrote it *cyre* in order to make it look like the Greek *kyrios*, a lord!—We have the Latin word *senior*, the comparative of *senex*, which means "old";

senior, "older." Hence we have the forms *senhor*, *senher*, *seigneur*, *sieur*, *sire*. From the French *sire* we have the English *sir*, which corresponds to the French *sieur* in *monsieur* (my-sir), to the Italian *signore*, to the Spanish *señor*. All these titles, as their etymology indicates, were used at first as a mark of respect to old age; afterwards as a mark of respect to every body.

Madam is a French word: *ma-dame*, my lady. "Dame" is from Latin *domna*, for *domina*, mistress.

Damsel, a girl, French *demoiselle*, Italian *damigella*, is to be carried back to a Latin *dominicella*, a little mistress.

Lord, Middle English *louerd*, Anglo-Saxon *hlaford*, from *hlaf*, a loaf; *ord* for *weard*, a warden, a keeper, a master; hence *hlaf-ord* (*hlaf-weard*) *loaf-keeper*, that is "the master of the house," the father of the family.

Duke, *marquis*, *count*, *baron*, *knight*, have all their origin in the military institutions of feudalism. *Duke* is from Latin *duc-ere*, to guide, to lead; "a leader." *Marquis*, Middle English *markis*, Old French *markis*, *marchis*,

“the governor of a ‘*marka*,’” (mark) that is a border country. The border provinces (marks) had to be strongly organized, and ready to repel foreign invasions. Their governor was therefore a military man, and was called a “*marquis*.”

Count, French *comte*, is from Latin *comitem*, “a companion,” from *cum*, with, and the verb *ire*, to go. The “*count*” was the companion, the follower of the prince in battle.

Baron means simply “*man*.” In the Neo-Latin languages it meant generally a man strong, gallant, noble. We find it also in the form *bar*; for instance in the old Provençal; “Le bar non es creat per la femna, mas la femna per lo baro,” “The man was not created for the woman, but the woman for the man.” *Knight* corresponds to the German *knecht*; as *night* to *nacht*. It meant a “servant,” as *knecht* does. But it was applied especially to soldiers and officers who helped, who followed their captain in the field.

Gentleman, the highest title in a democratic community, is not at all a democratic word; it appeals especially to those principles

of heredity with which democracies are not friendly. *Gentle* comes from Latin *gens*, which means a *clan*. *Gentleman* then means properly a man who belongs by birth to a certain clan, to a certain class of society. With the spread of education, with the diminishing inequality of fortunes and rights, the etymological meaning of gentleman has given way to its present and better meaning. *Nobleman*, on the contrary, followed quite an opposite road. It meant properly, a man well known, distinguished: but by virtue of the hereditary principle, and especially of hereditary transmission of titles, *nobleman* was called anybody who belonged to some particular class, regardless of his personal claims to be a "distinguished man."

Such is the life of words: some lose their primitive nobleness, and are, so to speak, dethroned; others, following luckily in the track of modern civilization, are pushed along, and exalted and ennobled in accordance with the evolution of our ideas and the progress of our social life.

POLITICAL WORDS

Politics, political, etc., are to be referred to Greek *polites*, a citizen, from *polis*, a city. "City" is (through French *cité*), from Latin *citatem*, an abbreviated form of *civitatem*. (Compare *aetas* from *aevitas*; *momentum* from *movimentum*; *fomentum* from *fovimentum*.) *Civitatem* is from *civis*, a citizen: in *civis*, we have that root *ki*, Sanskrit *çi*, to rest, to live, which we have already met in *koimao* (whence, *comedy*, *cemetery* and *quiet*).

Citizen is from city; Middle English *citisien*, *citizein*, *citesain*. The *z* (sometimes turned into *s*) is a corrupt rendering of the Middle English symbol ȝ, which properly means *y*, when occurring before a vowel. The same mistake occurs in the Scotch names *Menzies*, *Dalziel*, miswritten for *Menyies*, *Dalyiel*, as proved by the frequent pronunciation of them according to the

old spelling. Hence *citizen* stands for Middle English *citizen*, *citien*, Old French *citeain* (compare modern French *citoyen*) formed from *cit  *, or city, by help of the suffix *ain*, Latin *anus*. From *civis*, a citizen, we have *civil* "belonging to the city" "polite," "cultivated"; and from "civil," to "civilize" and "civilization".

Town, Middle English *toun*, meant properly, *inclosure*. The Anglo-Saxon *tun* meant originally hedge; hence the verb, *tynan*, to "inclose." The meaning recalls to our memory times when every village had to be a kind of fortress, had to be *inclosed*, on account of the unsettled character of society and the continual wars.

The same meaning is at the base of the word *ward*, a watching, a protection.

County is a feudal term, and it is connected with *count*. "County" was the district over which the count presided.

Republic means "common-wealth," from *res*, "thing," "wealth," and *public*, "of the people." *Public*, Old Latin *publicus*, is from Latin *populus*, "people"; contracted from *populicus*.

Empire is from Latin *imperium*, "com-

mand," "rule"; *emperor*, through French *empereur*, from Latin *imperator*, "commander."

Confederacy, *confederation*, *confederate* are from *con*, "with," "together," and *foeder*, the stem of the Latin word *foedus*, a league. *Foedus* is from an Indo-European root *bhidh*, which means to *bind*; hence *confederate*, "bound together."

"*Government*" had once a far humbler meaning than at present; it comes from the Latin *gubernare*, and this from the Greek *kubernao*, which meant to *steer*. The word was transferred from a ship to a political community, and it meant "to guide," "to rule." *Gubernator*, from which our "governor," was the pilot of a ship.

President is a participial form of the verb *præsidere*, from *præ*, before, and *sedere*, to sit; to sit before or above, to preside over.

King, Anglo-Saxon *cynning*, from *cyn*, a tribe, a race; and the suffix *ing*, which means "belonging to." Hence *cyn-ing*, "the man of the tribe," "the chief."

Queen, Anglo-Saxon *cwen*, Gothic *kwen*s, Old High German *quena*, meant properly a

woman, a wife; Greek *gyné*, Russian *jená*, Sanskrit *janí*, a woman, a wife. All these words are to be referred to the Indo-European root *gan*, to produce, to generate.

Aristocracy meant properly a government of the best men; from the Greek *aristos*, "the best," and the root of the verb *krateîn*, to be strong, to rule, to command. But with a significant evolution, by "*the best*" it came to be meant "a privileged order"; the richest, especially the owners of the land.

Democracy means a popular government, from the Greek *demos*, the people, and the same verb *krateîn*, to be strong, to command. *Demos* properly meant a "country-district," from the root *da*, to divide; *demos* was the allotment of public land given to a part of the people, and *demos* also was called the people who enjoyed the property of that allotment. This is a significant word, as it helps us to see into the condition of the property of land in very remote times, where all history is silent.

Demagogue is from the same word *demos*, and *agogs*, leader, which is derived from *ago*, to drive. *Demagogue* is the man who "drives the

people." In this origin of the word we have the explanation of the bad sense in which we use it. By a demagogue, people are not led by reason, but they allow themselves to be driven, like cattle. He goads them on by exciting their passions, and flattering their prejudices.

Candidate is a true Roman word from *candidus*, "candid," "white." In Rome, the aspirant to a public office had to wear a *white* robe; hence he was called *candidatus*, "dressed in white." The white robe was, of old, symbol of the stainless life which was required of the aspirant; but how words change! Who would discover now-a-days any connection between *stainless* and *candidate*?—The aspirant, thus dressed in white, used to go around and salute his constituents, and solicit their votes. This going around was called *amb-ire* from *amb*, around, and *ire*, to go; and from the verb the substantive *amb-ition* was formed. Hence *ambition* came to designate "seeking for preferment"; and, from politics, came to be applied to every branch of human life.

The candidates once picked out (*elected*, *e*, out, *leg*, to choose,) meet in Parlia-

ment (from French *parler*, to talk, to discourse), or in *Congress* (from *cum*, with, together, and *gressus* a past form of the verb *gradi*, to step, to go). *Congress* is almost the same word as *con-vention* (*ven-ire*, to come; to come together).

Senate is properly the assembly of "the elder" from Latin *senex*, old. When civilization was in its beginning, when education, travels, etc., were almost things unknown, the highest ability depended on experience, and this had only to be acquired by age. Hence "the elder" were intrusted with the greatest authority in public matters. We have retained the word, although we have altered its meaning not a little.

Congresses and Senates *deliberate* (weigh carefully, from *liberare* [librare] to weigh, from *libra*, balance). They *discuss* (that is they "shake apart" from *dis*, "asunder," "apart," and *cutere*, a reduced form of *quaterere*, to shake). They *ventilate* (they air, they shake in the air, from *ventus*, wind, air) the matters under their consideration; they appoint *committees* (from to commit, to intrust), and they *charge* them

("charge" is a French word from Low Latin *caricare*, and means to load, to put upon somebody's shoulders) with the *investigation* ("hunting up," "tracking out" from *vestige*, Latin *vestigium*, "a foot-print," "a trace;") of some matter.

One of the most important, nay, the most important branch of public administration is *law*, which was in Middle English *lawè* and in Anglo-Saxon *lagu*, Swedish *lag*, Danish *lov*, and which means that which "lies in place," which is in due order, which is as it must be. The same fundamental meaning we have in the German *recht*, "right," "straight," and in the French *droit*, Italian *diritto*, Spanish *derecho*, from Latin *directum*, "straight," "right."

Equity is from Latin *aequus*, equal, that is, "equal for all," "just."

Just, *justice*, *jurisprudence*, *jurisdiction*, and also *judge* (and all its derivatives) *judicial*, *judgment*, to *adjudge*, *prejudge*, etc., are to be referred to the root *iu*, which means "to bind." From this root we have the Latin *ius*, which corresponds to our "law." *Law* means properly that which is right; *ius* considers it in its

social effects, and means that "which binds." From *ius*, we have "just" and "justice," and "jurisprudence," "jurisdiction," etc. *Judge*, French *juge*, is in Latin *iu-dex*, and the stem is *iu-dic*, he who "tells," who shows the law. *Dic* is the same root that we have in Latin *dic-ere*, properly "to show," and then "to tell"; in *in-dex*, *in-dic-ate*, etc.

The word *chattel* which is so common in law, is merely a doublet of the word *cattle*, (compare "canal" and "channel," "chant" and "cant," etc). In Old French we have *catel* and *chatel*, both from Low Latin *capitale* and *captale*, "capital," property, goods. *Capital* is the Latin form, and *cattle* and *chattel* are the Anglo-French forms of the same word.

This process by which a word meaning personal property in general, came to be applied to a single kind of personal property, that is to that personal property (cattle) which in times of undeveloped commercial and industrial life is of the greatest importance, is also illustrated by the evolution of the meaning of *pecunia*, which means "money," and which we have in such words as *pecuniary* and *impecun-*

ious. *Pecunia* meant first "wealth," and then the representative of wealth, "money"; and comes from the word *pecus*, "cattle," which is almost the only form of wealth with primitive peoples. Again we find exactly the same evolution in the meaning of the word *fee*. *Fee* is in Anglo-Saxon *feoh*, in Gothic *faihu*, in German *fieh*, and corresponds normally, according to Grimm's law, to Latin *pecus*, Sanskrit *paçu*. The word *fee*, then, meant properly *cattle*, and then "property" in general, and then *money*. In this sense, however, it is confined to the money paid to certain professions, as lawyers, doctors, etc.

Money, Middle English *monneie*, is a Latin word from *moneta*. *Moneta* was a surname of Juno, in whose temple at Rome money was coined. *Moneta* means to "warn," to cause to remember, from the verb *monere*, to warn. This reminds us of the primeval office of money; which was to "give a sign of," to "represent" wealth.

IV.

COMPARATIVE GRAMMAR.

THUS far we have examined words alone, each word detached in its separate existence, and have shown that at the bottom of every word a root may be found which has a general meaning. But now the question arises, how from such roots are words formed? For instance, we have the verb *correspond*; but from such verb how do we form the noun *correspondence*? How do we bridge over from roots to verbs, and nouns, and adjectives, and adverbs?

We say that we add to the root certain suffixes. What are these suffixes? whence do they come? what is, if any, their meaning? Why, if we say *letter*, do we understand one certain object, and by saying *letters*, convey the idea of many objects of that kind? What mysterious power is there in that *s* to multiply objects before our consciousness in that way?

And then, what do we mean by *gender*? How is it that in French, for instance, *la table*, "the table," is feminine, while *le chapeau*, "the hat," is masculine? And how can we make a root bend its meaning to certain conditions of time and mood? I say *I love*, and make people understand I speak of a certain state of my heart at this present instant; I say *I loved*, and by addition of this mere *d*, I make all people, who know English, understand that I do so no more, that now the state of my heart is changed. In short, we have thus far considered roots separately, in their own general meaning, but it remains for us to study how they are so changed as to express all those relations which are conveyed by our speech.

This is the task of *Grammar* rightly understood. Many people have an imperfect idea of what grammar is. They speak of the rules of the grammar of a language just as they would of the laws that rule the country where that language is spoken. They have a vague idea that somebody has fixed those grammatical laws, just as a Congress or a Parliament makes other laws, and they look upon grammar

as a fixed, invariable code, from which none can depart under penalty of being taxed with ignorance and held up to ridicule.

But rules of grammar are dictated by nobody, or at least by no particular body. Grammar is simply an objective science, like medicine, statistics and political economy. It has been treasured up by the long, unremitting observations of succeeding generations. Grammarians, or rather, before such name was made possible, learned men of any kind looked at the phenomena of the language they were speaking, observed many facts, and further noticed that many of these facts could be classified, so to say, under the same heading, and they formulated the results of their observations in those principles which constitute what we call the grammar of a language. Thus, for instance, if one makes the English language the object of his studies, he sees that to constitute an English sentence, many words are required, and that of those words some are constantly employed to indicate an object, some to mean a quality, some others an action, and in this way by and by he finds that he can classify all English

words as nouns, adjectives, verbs, pronouns, adverbs, articles, etc.

Further on he sees that nouns, like *dog*, *letter*, *feather*, *walker*, etc., mean only one object of one kind ; but *dogs*, *letters*, *feathers*, *walkers*, mean many objects of that same kind. Therefore he formulates his rule that, in the English language, to form a plural one must add an *s* to the singular. He finds, however, that the plural of *foot* is not *foots*, but *feet* ; and he records this as an exception.

When he comes to the verbs, he sees that *lovest*, for instance, is referred to the second person, *loves* to the third, and *loved* refers to the past. In this way he draws a paradigm of English conjugation. Here, too, he finds verbs whose conjugation does not follow the majority, and he puts them aside under the heading "irregular verbs."

In this way he can form a grammar of the English language. In the same way any body could compose a grammar of any language, by studying, analyzing, comparing and classifying diligently all the modifications which the words of that language undergo.

Step out of your door, take the most humble, unknown dialect that is spoken in your neighborhood, and you can draw a grammar of it just as good as the grammar of the most noble language in the world.

But it is self-evident that we put nothing of our own into the language, while we write its grammar. We simply observe and classify facts. If, instead of following the facts diligently, we try to make them bend to some preconceived theory of our own, then we may be sure that we are wrong, and the results of our labor will be, at the best, useless.

Where are to be sought the materials necessary in order to write the grammar of a language? Of course we must look at the language as it is spoken and written (when it is written) by the majority of those who know it best; or by those who, by their education and social opportunities, are presumed to know it best. Because in language, as in many other things, *best* is simply that which is used by the best people; that is, by the people best educated. We have no other criterion to test the excellence of language than this.

Thus, when we say that this or that is a rule of English grammar, we mean simply that such is the use of the people who know English best; and a violation of a grammatical rule consists in departing from such use.

And as use changes in language as well as in every thing else, it follows that grammars change. When we speak of English grammar we do not mean the English grammar of two or three centuries ago, but the present grammar—the grammar according to the best usage of nowadays. The language of Shakespeare is English: still its grammar is not exactly the grammar which we now follow. Even more different is the grammar of Chaucer, who still wrote in English.

Use, then, changes, and grammar, which is a mere record of it, must follow it and change accordingly.

Hence the idea follows that we can have two kinds of grammar: for instance, we can take the English language as it is spoken at a given period of time (to-day, for example), and formulate its grammar. This is the kind of grammar that we study at school; that is,

the grammar of our own language as it is best spoken and written in our own days. But we can also take the English language at its beginning, for instance, when it is developed far enough from Anglo-Saxon to be entirely distinguished from that language, and study what its grammar was then, and follow its changes, step by step, from century to century, recording every change in the declension, in the conjugation, in the syntax, down to the present day. This would be a *historical grammar*.

Thus one who is given to political studies, can undertake the study of the English constitution as it is now; what are the rights of the Commons, what those of the House of Lords; how both houses are constituted, assembled and dissolved; who appoints the ministers, what are the powers of the queen, etc. Or otherwise he may choose to go back as far as possible in the history of the English people, and follow, step by step, that long series of magnanimous struggles, of waverings, compromises, wars and revolutions, debates and legislation, out of which the present constitution of England has risen.

Naturally enough this second course will afford a far deeper, far more philosophical knowledge of the English constitution than the former.

In the same way historical grammar affords a far deeper insight into the nature of a language than the grammar which is commonly studied, and which we may call the empirical grammar. This tells us simply the *fact* that in order to denote *many* things we must add to a noun an *s*, and in order to make a verb mean a past tense we must add to its root a *d*. But historical grammar shows us whence that *s* and that *d* come, what was their primitive form and *meaning*, and the successive changes by which they were reduced to their present form. In this way the study of grammar from a merely material statement of facts, and oftentimes a tiresome drudgery to be gone through by dint of mechanical memory, is raised to the dignity of a scientific study of the utmost interest and importance.

But, in fact, it is impossible to follow out this historical method of grammatical re-

searches, without resorting to *comparisons*; thus many times it is impossible to step from one French form to the following one without bringing in as a term of comparison a form of Provençal, or Italian, or Spanish, or other kindred language. Generally we can not make a complete study of the grammar of a dialect without keeping our eyes also upon the cognate dialects. Thus the historical method is linked with the comparative method; historical grammar with comparative grammar. And fortunately it is so, as we are thereby obliged to call in to our help time and space, to look back into the records of the past and widely around us among neighboring languages, as far as directions of logic and kinship of languages permit.

In this way we come to the idea of *historico-comparative grammar*, which is one of the glories of this century, and the main branch of the science of language.

We may now inquire what constitutes properly the subject of grammar in general. Grammar deals with: 1, the formation of words; 2, accidences of words; 3, syntax of words;—that

is, roots being given, grammar studies: 1, how from those roots we make nouns, adjectives, verbs, and the other so called parts of speech; 2, when such words are formed, grammar studies their *accidences* or modifications, that is how, for instance, a noun meaning *one* object is made to signify many; how one verb comes to express the different relations of time and mood; 3, when all this is done, grammar has to study how such words are combined in order to convey our ideas clearly and fully.

We may for the present leave out this third part and bring our considerations to bear on the first two, the making of words and their *accidences*.

The ways of attaining these two results differ widely in different languages. In some languages the proceedings are very simple: they have no *accidence*, no inflection whatever. The Chinese language, for instance, never causes its roots to undergo the slightest modification. We may say that in Chinese roots have been petrified in their primitive form, and no further change has been wrought in them. In Chinese

all the relations which we express by declension and conjugation, are signified by the collocation of words. Thus *ngò tà nì* means "I beat thee"; but *nì tà ngò* means "thou beatest me." *Ngò gìn* means "a bad man"; *gìn ngò* means "the man is bad." (M. Müller, i. p. 333.) In these languages, of which Chinese is the prototype, every word is at the same time a root, a noun, an adjective, a verb; and their words being all of one syllable, they are called the *monosyllabic languages*. It is self-evident that in such languages there is no trace of what we would properly call a grammar; no declension, no conjugation. Still they are able to express all the relations of tense, of mood, etc., which we express with our own languages.

Next to these languages there come the *agglutinative* languages. In these we find already two or more roots grouped together, but in such a way that one of them, the principal one, is never modified; we can see it in the composition of the word as clearly as if it were isolated. One of the best and most important specimens of this class is the Turkish language.

In Turkish, the root which contains the fun-

damental meaning of the word, is never changed, never broken in any way.

Thus *sev*, in Turkish, conveys the idea of "love" in its most general sense. From *sev* we have the verb *sev-mek*, "to love," and the substantive *sev-gu*, "love." *Sev-er* means "lover." *Sen* is "thou," and *siz* is "you"; "thou lovest" is in Turkish *sev-er-sen* (lover-thou); "you love" is *sev-er-siz* (lover-you).

From *sev-mek* "to love," by addition of *in*, we make a reflexive verb: *sev-in-mek* "to love oneself," to rejoice, to be happy. If we add *ish*, we have a reciprocal verb: *sev-ish-mek*, "to love one another." Now each one of these verbs can be made passive by the addition of *il*: *sev-mek*, "to love"; *sev-il-mek*, "to be loved"; *sev-in-mek*, "to rejoice"; *sev-in-il-mek*, "to be rejoiced at"; *sev-ish-mek*, *sev-ish-il-mek*, which can not be translated.

Many other verbs can be formed, but the root *sev* remains throughout unaltered and evident.

These languages are called *agglutinative* because their roots are not kept separated as in Chinese, nor fused together as in the Indo-

European languages, but they are, as it were, *glued* together, so that we can see clearly their links and joints.

Finally we have those languages in which both roots are so intimately united as to make it very difficult to separate them, without long and scientific preparation and diligent analysis. These are called *inflectional* languages, and comprehend the Indo-European and the Semitic family. We call them *inflectional* languages because of the inflections to which they submit their roots.

When we reduce these languages to their lowest terms, so to speak, we find in them two kinds of roots:

1st, the *predicative* roots, which convey a general idea, which *predicate* something. Of this kind are the largest number of roots. All the roots we came across in our etymological researches, belong to this category; 2nd, the other kind of roots are *demonstrative* roots; and are used in conjunction with the predicative roots in order to modify their meaning, so as to adapt it to all the relations which we want to express. For instance, in the Indo-European lan-

guages we have a root *as* which has the general meaning of "be," but when our forefathers wanted to modify that general meaning so as to refer it to the first person, and make it mean "I am," what could they do? They resorted to a *demonstrative* root which is applied to denote the first person, and they said, in Sanskrit, for instance, *as-mi*, which means properly "be I." In the same way they added to the root *as* the demonstrative roots denoting the second or third person, to make out the meaning "thou art," "he is." They did the same with any other verb. They did this also in order to make nouns express those different relations which in some languages are expressed by cases and which we represent by "prepositions." The *desinences* of the cases are nothing but demonstrative roots; roots whose primitive form it is now very difficult to restore, but whose existence we have no reason to doubt. The only difference between our prepositions and the desinences of cases is this, that the former go before the noun, the latter after. In Sanskrit, for instance, we have a *locative* case, and there are traces of it in Latin and Greek. The desinence of this case is *i*,

very likely the root from which we have the Latin preposition *in*. So *hrid* means "the heart"; *hrid-i* means "in the heart." Now, what difference is there between these two expressions, but the collocation of the determining element?

In the same way all cases were formed. Certain demonstrative roots were added to the predicative roots. In this conjunction both roots lost their identity; their sound underwent great changes; but, thanks to the comparative method, we have been enabled to separate them, to see how they were put together, and what is the function of either of them.

This, if we consider a moment, is indeed a great result. Grammar, which to the looker-on seems such an unsolvable problem, such a mystery, is by these scientific researches laid bare before us; we see into its features, just as we examine animal and vegetable tissues through the microscope. We see that this marvelous concretion of cases and numbers, tenses and moods, has been worked out laboriously and elaborately for centuries and centuries, in a very simple way, by *addition*. A *demonstrative* element was added to a predicative ele-

ment. At first, as in Chinese, both elements retained clearly their identity, their own personality, so to speak ; afterwards, as in Turkish, only the first element, the most important, remained unchanged, while the others underwent some slight alterations. Finally, in the languages of the superior races, both elements were cast together, both losing in the new resulting word their primitive form and identity.

We make now, with the utmost facility, numbers of thousands of millions of billions, and our mind can grasp such numbers easily, if not with absolute precision, as soon as they are enunciated, or written, before us. Still we know that every system of numeration grew out of very humble beginnings ; men began to count by their fingers, and it took centuries before they were able to comprehend a number as large as *ten*. Even to-day there are tribes who can not count further than two, three or four ; after these numbers they say "many" or countless. But by and by, with the progress of civilization, with the development of the human mind, a system of counting

was developed which the poor uncultivated mind of the savage is not even able to understand.

In the same way, by slow but steady improvements, through the simplest means, were developed the complexities of language of which our grammars are the exponents.

As an instance from our own language how the most complex relations are expressed by the simple addition of one root to another, take the English future : *I shall love*. Here the composition, or rather the use of *two* roots, is self-evident. The same we have in German : "Ich werde lieben." In French the puzzle begins : we have only one word : *aimerai*. But historical and comparative researches show us that also in *aimerai* we have two words, which were once written separately. In French as well as in Italian and Spanish, the future is made of the infinitive of the verb and the present of "to have." We say "I shall love" ; the new Latin languages say : "I have to love." *Aimcr-ai*, I shall love : *aimer-as*, thou shalt love ; *aimer-a*, he shall love, (*aimcr* to love ; *ai*, I have ; *as*, thou hast ; *a*, he has). Even an elementary study of French will show that, however irregu-

lar a verb may be, its future is always ending in *ai, as, a*; because the second element is always the present of *avoir*, "to have."

In Italian the singular of the present of "to have," *avere*, is *ò, ài, à* (written also *ho, hai, ha*), and *all* the Italian verbs, whether regular or not, end in the future in *ò, ài, à*; for instance, *udire*, to hear; *udir-ò*, I shall hear, *udir-ài, udir-à*, etc.

In Spanish we have *he, has, ha*, (I have, thou hast, he has) where the *h* is not pronounced; *amar*, to love, makes in the future: *amar-é, amar-ás, amar-á*, etc; and so all the Spanish verbs.

In Latin we have *ama-bo*, "I shall love," which through comparative analysis, can be shown to be a compound of the root *am*, of the verb *am-are*, to love, and the root *bhu* which means "to be"; so that *amabo* is properly a compound word and means "I am to love."

We could push this investigation further in other languages, always with the same result. We would always find the idea of the future expressed by the addition of one root to another.

Let us now turn to the idea of the past.

We have in English, *I loved*. Where does this mysterious *d* come from, which works so great a change in the meaning of our root? Of course we can not make any thing out of it, as long as we consider this word alone. It would be just as bewildering as to attempt to find the meaning of "Kittie" without looking at the other forms of the word. We must inquire, we must look back and around. We must accumulate facts upon facts, in order to make our observations trustworthy.

In order to give reasonable width to our researches, we must recall the classification of the Indo-European languages, and the position of English therein. We have seen that one of the most important branches of that family is the Teutonic, which is divided into three other branches: I. Scandinavian; II. High German; III. Low German.

I. To the Scandinavian division belong the following tongues: 1. Icelandic; 2. Norwegian; 3. Swedish; 4. Danish. The old Norwegian, sometimes also the old Icelandic, is called *Old Norse*.

II. To the High German division belong:

1. Old High German (comprising the Thuringian, Franconian, Swabian, Alsacian, Swiss and Bavarian dialects) spoken from the beginning of the eighth to the middle of the eleventh century.

2. The Middle High German, spoken in upper Germany from the twelfth to the end of the fifteenth century.

3. Modern High German, spoken from the end of the fifteenth century to the present time.

III. The Low German division comprehends :

a. Gothic, the oldest of the Teutonic dialects. Its oldest record is found in the translation of the Bible by Bishop Ulphilas (born 318, died 388), a great part of which, however, has perished.

b. Frisian, preserved in some documents of the twelfth and thirteenth centuries, and still spoken in Friesland, along the coasts of the North Sea, between the Weser and the Elbe, and in Holstein and Sleswick.

c. Dutch.

d. Flemish.

e. Old Saxon.

f. English.

It follows from such classification, that in our inquiries into English grammar, we must first trace back the English words to their oldest forms in the English language, then compare them with the corresponding forms in the other Low German languages, then in the Scandinavian and High German, then in the whole Indo-European field. In order to understand the form *I loved*, we must, first of all, take notice of a discovery of comparative grammar, that we have so-called *strong verbs* and *weak verbs*.

All *strong verbs* (to which category belong the generality of the so-called *irregular verbs* in English) originally formed their past tense simply by *repeating* their root. We see that here, too, the process is very simple. Thus, from the root *bhug*, to "bend," we had the root of the past, *bhug-bhug*; then by shortening the first part, *bhu-bhug*; to this, the personal ending being added, we have the Sanskrit *bhu-bhog-a*, which is the past of the root *bhug* in Sanskrit, and means, "I bent." In the same

way in Latin from the root *fall*, "cheat," we have, with slight and normal change of vowel, the past *fe-fell-i* (from *fel-fell-i*). But in the course of time these forms were worn out more and more; and it became, by analogy, a rule that the middle consonant disappeared; *fug*, to escape, gave "fug-fug-i; " "fu-fug-i; " "fu-ug-i; " "*fugi*;" I escaped; *fac*, to make, gave "fac-fac-i; " "fa-fac-i; " fa-ic-i; " *fe-ci* " I made.

This same process we can follow in English. The past of to *hold* is in Gothic *hai-hald*; then we come to *ha-hald*, *ha-hild*, *hailed*, *held*; Old High German, *hei-halt*, *hi-alt*, Modern German *hielt*. The Gothic *hait-an*, to call, makes in the past *hai-hait*. The English *hight*, "was called," is the past of the Old English *hat-an*, and corresponds to the Gothic *hai-hait*.

Gothic *let-an*, to let, past *lai-lot*. Gothic *laik-an* to leap, past *lai-laik*. The English *did* is the past made in the same way of the verb *do*. *Did* was in Old English *di-de*; in Old Saxon *de-da*; it corresponds to Latin "*de-di*," from "do."

The *weak* verbs form their past by adding to their roots the past of the verb "to do." Thus

in Gothic from the verb *nasi-an*, to save, we have the past *nasi-da* which stands for the more complete form *nasi-deda*, (I did save); in fact, in plural we find the full form *nasi-dedum*, we did save. In Old English this verb is *neri-an* and its past is *nere-de* for *nere-dide*. We have also *luf-o-de*, loved. *Loved* stands for the full form, I *love-dide*, that is, "I did love."

Thus we see that the way of forming the past of a verb, however mysterious it may seem now, was at its beginning quite simple. Either the root was repeated, or the verb *do* (in its reduplicate form) was added thereto.

With regard to the change of the meaning of a word from singular to plural, the evolution has also been simple and slow; first we had a number, called *dual*, to mean *two* objects; then we find traces in some languages of a number denoting *three* objects; finally we reach the plural, signifying an indefinite quantity of objects. We can see that the suffixes for the formation of the plural were more *substantial*, so to speak, than they are at present; even in English we find suffixes like *as*, *us*, instead of a simple *s*; but what those suffixes were properly and what

they meant, thus far, unluckily, has not been ascertained.

More satisfactory are the explanations of the origin of genders. The primitive man could not obtain any notion of gender save from man and woman, male and female; and by the process which is common to uncivilized people and to children of transferring to every thing in the world their own conceptions and their own life, men came to represent to themselves even inanimate objects as clad with a certain personality, and accordingly these objects were distinguished in gender, whether they were conceived as male or female beings. This process applied at first only to some inanimate objects, to those that were nearest, or in any way most important. By and by, through analogy, it was applied to all things in the world. Analogy rested on the meaning of words or, especially, on their endings; but when, in the wear and tear of language, the termination was worn out wholly or partly, even this thread to distinction of genders became lost, and we arrive at such a state of things as we find with German genders,

where, to say the least, confusion reigns. In this respect English is far more advanced and logical than any other of the leading languages. In English the *grammatical* distinction of gender has been almost entirely suppressed; the idea of gender is conveyed simply by the meaning of the word itself. Only this process has perhaps been carried too far, and sometimes we are obliged to resort to that clumsy *he* and *she* ("he-goat," "she-goat"). "It is an idiom," Marsh says, "common to the Scandinavians and the English, which in awkwardness surpasses any thing to be met with in any other speech."

It remains now to look at those various suffixes which enter into the formation of nouns and adjectives and adverbs.

We have already had occasion to see that it is a particular advantage of the English language to be able to draw suffixes from two main sources: from the Teutonic and from the Latin branch of the Indo-European family.

Suffixes were once independent words, which by being added to principal roots to modify

their meaning, gradually lost their independence and became mere signs of relation, and were employed as *formative* elements. Unluckily this process of disintegration began so long ago that in many cases it is, for the present at least, impossible to find out what their original meaning was. Some of them, however, we can easily trace back to independent words with a specific meaning. The suffix *ly*, for instance, was in Old English *lic*, Gothic *leiks*, and meant properly *like*:—strong-ly (strong-like), man-ly (man-like). In many cases we have the full form *like* (war-like, dove-like). The suffix *wise* is identical with the substantive *wise*; otherwise (in another wise, mode), nowise, likewise.

Dom, Old English *dom*, German *thum*, means authority, judgment, dominion:—thraldom, wisdom, dukedom, kingdom.

Fare means way, course:—thorough-fare, welfare.

Hood, *head* (Old English *hād*, state, rank, character); manhood, childhood, godhead, maidenhead.

Rick (Old English *rice*, power, dominion),

bishoprick; Old English *kinerick*=*kine-riche*, *kine*=royal.

Ship (Old English *scipe*, *scepe*=shape, manner, quality), friendship, lordship, hardship.

Wright (Old English *wyrtha*, *wrihte*, workman), wheelwright, playwright.

Fold (Old English *feald*, fold); twofold, manifold.

Ful (Old English *ful*, full), hateful, wilful (Old English *willesful*).

Less (Old English *leas*, Gothic *laus*), "loose from"; it has no connection with *less*, the comparative of *little*:—fearless, joyless, guiltless.

Some (Old English *sum*, Old High German *sam*, *same*, like), fulsome, irksome, wholesome, etc.

For the suffixes derived from the Romance languages, generally we can do nothing more than retrace them to their Latin form, and in many cases to Sanskrit, Greek, and other languages akin. But very seldom can we show what their primitive form was and what their meaning. A satisfactory enumeration and analysis of these suffixes can be found in

Morris's "Historical Outlines of English Accidence," to which the reader is referred.

Thus, to sum up this chapter, we have seen that the idea of grammar, which we owe to the science of language, is by far larger and higher than that which is commonly accepted. Grammar is the study of the means by which sounds with a merely general meaning (commonly called *roots*) are brought to express all the relations and peculiarities of our thoughts. These means are not the same all over the world: they differ widely in all languages. In some languages (the monosyllabic) the roots are simply put one after the other, their general meaning being modified by their collocation. In other languages (the agglutinative) two or more roots are put together, but in such a way as to preserve the principal root unaltered. Other and more complicated languages (the inflectional) mould together in one body their predicative and demonstrative roots.

This distinction however is not so absolute and iron-bound in nature as we might imagine. There is a gradual ascendance from the first to the last type of languages, and as our researches

in the field of monosyllabic and agglutinative languages make headway, every thing seems to point out that new links will be found which will show unmistakably a continuous concatenation in the development of the various human languages; we have traces of agglutination in the monosyllabic languages; traces of monosyllabism and inflection in the agglutinative; and traces of agglutination in the inflectional languages. In fact, in nowise is it possible to explain the complex constitution of the inflectional languages, save by admitting that they have developed slowly, through secular improvements and the experience of generations, from the humblest stages of speech. All analogies point to the same gradual development in language, as we find in the fauna, the flora, the suns, and all things in the universe.

The formation of dual and plural numbers, the distinction of persons and genders, the formation of the past and future tenses, appear to be the result of very simple processes, and quite analogous with those going on under our own eyes in the most imperfect and rude tongues of men. The progress of language, it

may be useful to repeat it, has been similar to the development of mathematics. It began from the humblest origin. That day, when a man pointing out one finger, and then another, gained the conception of both fingers together, witnessed a great step. When the human mind became able to have the conception of the number *two*, an abyss was bridged over. It was then made possible to go to the conception of three, and then of four, and so on, until, by and by, with the accumulated experience of centuries, a system of numeration was wrought out, and arithmetic and algebra, and the wonders of abstract calculations which weigh the stars and measure the unseen. The marvelous speculations of Kepler and Newton, not less than the winged words of Homer and the language which clothes the fiery thoughts of Shakespeare and Dante, were developed by degrees, slowly, through the course of centuries, from such imperfect and rudimentary elements of speech as fall now-a-days from the uncouth lips of the savage.

Such is the idea of language for which we are indebted to the linguistic science.

I suppose that now the reader may feel somewhat interested to know how this science began, and how it has been developed. A brief sketch of its history follows, which has been purposely delayed.

V.

OUTLINES OF THE HISTORY OF THE SCIENCE OF LANGUAGE.

THE science of language is one of the youngest sciences. It is hardly one century old. Before that a considerable amount of speculation, rather than of investigation, had been devoted to language. But those wandering and fragmentary pursuits could hardly deserve the name of science.

In the history of European culture, the first noteworthy observations on language we meet with in the Greek philosophers. Greek philosophy, which turned its powerful eye on every thing in the world, could not let such an important part of our life as language go unobserved. The attainments, however, were not very great. Plato and Aristotle knew the distinction of nouns and verbs, of conjunctions and articles. But their analysis of language did not go further than that. The great work-

shop in which language was studied and analyzed, and grammar was made as complete, in the main, as that which we study in our day, was the school of the Alexandrian critics.

Alexandria, in Egypt, as it is well known, was for some time a great centre of learning. Eastern and western knowledge met there, and were submitted to searching criticism. One of the most prominent works of the Alexandrian savants was the diligent study and editing of the great masterpieces of Greek literature, and especially of the Homeric poems. Such work, of course, could not be done without a good deal of philological investigations. They were the first to divide language into those parts (nouns, pronouns, verbs, adjectives, etc.) which we now study in our grammars. But although they worked out all the materials of a grammar, still they did not give us a complete and systematic grammar of the Greek language. The first Greek grammar is due to Dionysius Thrax, formerly a pupil in Alexandria, and afterward a teacher of Greek in Rome. In order to help his pupils, he wrote out in a systematic way those elements of philological

knowledge which the Alexandrian critics had elaborated. His grammar is still in existence, and the grammars which we study in our schools differ from that only in some accessories ; in the main they are merely repetitions of the work of Dionysius Thrax. The grammar of Dionysius, as well as our scholastic grammars, was merely practical and empirical. It had nothing to do with the historico-comparative grammar of which we have spoken in the preceding chapter. But poor as that grammar was, it is sad to think that it has been handed down for nearly two thousand years and whipped into millions of poor boys, without receiving a single improvement ; rather, with the addition of occasional blunders, arising out of misinterpretation of the original. It is a fact which shows what a difficult subject language is to deal with, and at the same time teaches us some moderation in the appreciation of our mental powers.

In time an event occurred which helped, or at least should have fostered in a great measure, a scientific knowledge of language ; I mean the advent of Christianity. In the first place,

Christianity, by teaching that all men are brethren, induced civilized peoples, such as Greeks and Romans, to pay more attention to the life and also to the language of their neighbors, whom they had thus far despised as barbarians. Besides, the missionary work undertaken by Christianity made the study of a great many languages necessary. A knowledge of different languages, and an implied assumption that the language of a poor, uncultivated people is just as worthy of attention as that of the peoples most cultivated—these two facts are at the bottom of a true science of language.

It is to be lamented, however, that such favorable tendencies were marred by a singular prejudice. People, in their zeal for the new religion, easily overshot the mark: they were prone to deny Roman and Greek civilization entirely, and to attribute to the Jewish nation an importance which facts by no means justified. Deeply impressed by the connection of Semitic civilization with Christianity, they saw nothing in the world but offshoots of that civilization, no important fact or legend but what

was connected with Hebrew, and in the same way in every language an offspring of the Hebrew tongue. Now that we have seen how linguistic researches are pursued, and what is the true position of Hebrew in respect to the other languages, we can easily understand how absurd and misleading such opinions were. Still they held on for centuries, and years and years of painful work and an immense amount of ingenuity were spent in useless endeavors to prove that Latin, Greek and all languages known were derived from Hebrew. St. Gerome (quoted by M. Müller) says: "The whole of antiquity affirms that Hebrew, in which the Old Testament is written, was the beginning of all human speech." They started from the fact that the Old Testament was the most ancient book, and was written in Hebrew; as language had been revealed directly to man by God, and the Old Testament is a book divinely inspired, its language, Hebrew, must necessarily be the revealed language, the primitive language of mankind. In the sixteenth century an Italian scholar P. J. Giambullari, one of the most learned men of his age (and a very cultivated

age it was), wrote a book to prove that Italian is to be derived from Hebrew. Some people who had good sense enough to see the absurdity of such theories, revolted against them, but it was only to alight upon others not less wild and fantastic. They denied, for instance, that Italian or French could be derived from Hebrew, but instead of setting to work to find out from what language they had really come, they simply argued that Italian and French not being derived from Hebrew, Hebrew could not have been the primitive language of mankind. Therefore they looked around to find out which language had been the primitive one; being convinced that this question once settled, the origin of all languages would be explained by itself.

Of course it was understood that the primitive language was the language spoken by Adam. A Spanish gentleman claimed that Basque was the language spoken by Adam. Goropius, in a work published at Antwerp in 1580, *proved* that Dutch was the language spoken in Paradise! André Kempe maintains that God spoke to Adam in Swedish, Adam

answered in Danish, and the serpent spoke to Eve in French.

It is indeed a good lesson to all of us to see men of great learning, animated by the best intentions, wandering unconsciously so far away from truth.

We must come down to the last century in order to find a ray of light that promises to disperse the darkness which still involves language in an impenetrable mystery.

Leibnitz, the great philosopher, mathematician and scholar, was the first to perceive the necessity of studying languages as any other branch of science, that is, the necessity of starting from facts and observations. He was the first to suggest that missionaries and students were supplied with a list of the most common and most important words, and invited to write the translation of those words in every language they came across. This was the first rational step toward the foundation of a science of language.

Katherine, the Empress of Russia, deserves not a little credit for the help she brought to this science, then in its cradle. Russian ambas-

sadors were charged with gathering linguistic materials from all the world. She sent to them a list of words which had to be translated into the languages of the peoples to whom they were accredited. Washington himself, in order to please the empress, sent her list of words to all governors and generals of the United States enjoining them to supply the equivalents from the American dialects. She worked herself personally at the compilation of a comparative dictionary, whose first volume was published in 1787, containing a list of 285 words translated into fifty-one European and one hundred and forty-nine Asiatic languages.

Hervas y Pandura, a Jesuit of immense learning, collected specimens of more than three hundred languages, and wrote more than forty grammars. He was the first to notice that, in linguistic comparisons, grammars are to be more looked at and thought of than dictionaries. He saw that Hebrew, Chaldean, Syriac and Arabic are only dialects of the same family—the Semitic. He classified the Malaic and Polynesian languages, and discovered many analogies between Sanskrit and Greek.

These were good beginnings indeed ; still, amidst the confusion which seemed to be brought about by the increasing collections of materials, it is hard to tell what could have come out of such researches, but for a fact, to which really the beginning of the science of language is to be referred. This fact is the discovery of Sanskrit. Sanskrit was the language of ancient India. The modern dialects of India stand in the same relation to it as Italian and French to Latin. And as Latin has been for a long time the language of the Church, so Sanskrit remained the language of the Brahmins, even after it had ceased to be a living language.

That there was in the far east a language of an admirable grammatical structure, and that many of its words were not much different from the corresponding words in Latin and Greek, had often been reported by travelers.

Filippo Sassetti, an Italian scholar and merchant, had lived in Goa from 1581 to 1588. In a series of letters where he describes his eastern travels and the wonderful things he had seen, he tells us that there was in India a literary lan-

guage, called "lingua Sanscruta," which was learned by children just as we do Latin and Greek. That language, he says, has many words and particularly some numerals, like 6, 7, 8, 9, quite similar to the Italian.

Twenty years later (1606) another Italian, the Jesuit Roberto de' Nobili, went to India, and in order to preach more successfully the Christian faith, he devised to present himself as a Brahmin among the Brahmins. To that effect, he shut up himself for years and succeeded in mastering Sanskrit and some of the spoken dialects of India. He sent to Rome detailed relations of the language and civilization he had discovered; but Roman scholars and theologians failed to appreciate the importance of this information.

No great step was made toward a better knowledge of Indian lore until more than a century and a half afterward. In 1768 the Père Cœurdoux, who was a missionary in India, wrote to the French Academy "de Belles-lettres et Inscriptions": "Where does it come from that in Sanskrit there are many words that are common with Latin and Greek, particularly with Greek?"

He goes on quoting many instances of such affinities as *deva* and *deus*, God ; *ganitam* and *genitum*, generated ; *ganu* and *genu*, knee ; *vidhava* (from *vi*, without, and *dhava*, man) and *vidua*, widow ; *na* and *non*, not ; *maddhyas* and *medius*, middle ; *dattam* and *datum*, given ; *danam* and *donum*, gift ; etc. He compares the present indicative and subjunctive of the verb “to be” in Sanskrit and Latin.

Sanskrit.	Latin.	Sanskrit.	Latin.
asmi	sum	syam	sim
asi	es	syas	sis
asti	est	syat	sit
smas	sumus	syama	simus
stha	estis	syata	sitis
santi	sunt	santu	sint.

The letter of the Père Cœurdoux is indeed a remarkable monument of scientific penetration, especially when we consider that it was written more than one hundred years ago (1768).

In 1783 Sir William Jones founded in Calcutta the “Society for inquiring into the history and antiquities, the arts, sciences and lit-

erature of Asia," and in a speech before this society, in 1786, he declared that, " Whatever its antiquity, Sanskrit was a language of most wonderful structure, more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either, yet bearing to both of them a strong affinity. No philologist would examine the Sanskrit, Greek, and Latin without believing them to have sprung from some common source, which, perhaps, no longer exists. There is a similar reason, though not quite so forcible, for supposing that both the Gothic and Celtic had the same origin with Sanskrit. The Old Persian may be added to the same family."

These were very pregnant words. The attention of the scholars was turned to the east, whence a new light seemed to be rising. English officers and merchants with a scientific tendency, as well as European scholars, began to study Sanskrit and other oriental languages with a new vigor and a critical mind.

The great philological importance of Sanskrit lies in this fact, that it affords a new term of comparison for Latin and Greek. Once it

was customary to explain Greek words with Latin words, and vice versa; but, as Greek is not derived from Latin more than Latin is derived from Greek, there was no firm, solid ground for such comparisons. It was impossible to tell when they were right or when they were wrong. Sanskrit gave a third term of comparison; the table, to put it in a material way, received a new leg and was made to stand.

Besides, the structure of Sanskrit is such that it is far easier to look into the nature and composition of its words than into those of Latin and Greek. Again, such analysis had already been carried to a great minuteness by Indian grammarians, so that the way lay open before European scholars.

In 1808 Frederic Schlegel, the German poet and scholar, published his little book, "*Ueber die Sprache und Weisheit der Indien*" (on the language and wisdom of the Indies), where he boldly faced the conclusions that had to be derived from the study of Sanskrit, and was the first to see that the languages of India, Persia, Greece, Italy, and Germany belonged to one

and the same family, which he called the Indo-Germanic family of languages.

The work of Schlegel marks a revolution in the study of the science of language. Since its publication the life and success of this science have been assured.

The ideas brought forth by Schlegel were taken up by the scholars of all the world, particularly in Germany ; and laborious investigations were begun and carried on which converted the almost prophetic divination of Schlegel into absolute certainty, and his glimpse of a new horizon into broad daylight.

The work of Schlegel, M. Müller says, "was like the wand of a magician. It pointed out the place where a mine should be opened ; and it was not long before some of the most distinguished scholars of the day began to sink their shafts and raise the ore."

The first great product of minute and strictly scientific researches was the work of Francis Bopp.

Francis Bopp was born in Mayence the 14th day of September, 1791. He studied the classical languages in Aschaffenburg, and, led by a

strong desire of mastering the Eastern languages, went to Paris, where he remained from 1812 to 1816. For four years the quiet German shut himself up to study Sanskrit, Persian, Arabic, and Hebrew. The war that was raging all around him, throwing all Europe into confusion and convulsion, did not touch this extraordinary youth in the least. At the end of four years he published a comparison of the Sanskrit system of conjugation with that of Latin, Greek, Persian, and German. He went afterwards to London, and in 1822 to Berlin to teach oriental languages in that famous university.

From 1826 to 1833 he toiled on unremittingly with his studies of comparative grammar, and in 1833 he began the publication of his 'Comparative grammar of Sanskrit, Zend, Greek, Latin, Lithuanian, Gothic and German.'

This work which was finished only twenty years after in 1852, is a monument in the history of the science of language. The brotherhood of the Indo-European languages, which by Schlegel had been divined, here stands clear

and undoubtable before our eyes. The purpose of this work is clearly stated by the author in his preface: "I contemplate in this work a description of the comparative organization of the Indo-European languages, comprehending all the features of their relationship, and an inquiry into their physical and mechanical laws, and the origin of the forms which distinguished their grammatical relations. One point alone I shall leave untouched—the secret of the roots, or the foundation of the nomenclature of the primary ideas. I shall not investigate, for example, why the root 'i' signifies 'go' and not 'stand;' why the combination of sounds 'sta' or 'stha' signifies 'stand' and not 'go.' "

In the work of Bopp we have not only an immense amount of linguistic researches, but, what is even more important, we have a great model of the method by which such researches are to be pursued. All the work which has been done afterwards in the field of the science of language, has been mainly in the foot-steps of Bopp and in the light of his method, which is at once comparative and historical. Bopp

was fortunate enough to live to see the results of his own work; to see hosts of disciples undertake with youthful ardor and unremitting diligence the cultivation of that field in which he had been so great a pioneer. He was called the father of the science of language, and he fully deserved the title. He died the 23d of October, 1866, beloved by all who knew him, honored by the scholars of the whole world.

It would transcend the limits and the intentions of this chapter, if I had even to mention here the most important works which we owe to the successors of Bopp. The amount of lore accumulated is enormous; the greatest nations, England, France, Germany, Italy, and America took up the new science with admirable enthusiasm; but it is only fair to admit that Germany is the leader. Germany may be called the fatherland of linguistic lore.

What Bopp did for the Indo-European languages in general, Jacob Grimm did especially for the German branch, with his great German grammar (*Deutsche Grammatik*, 1819-1837.)

Other scholars, conspicuous among them Eu-

gène Burnouf, founded the Zend philology, while Frederick Diez, with his "*Komparative Grammar*" (1836), and his "*Comparative dictionary*" (1853), created the comparative philology of the new Latin or Romance languages.

Prichard, Zeuss and Stokes did the same for the Celtic dialects; Miklosich and Schleicher for the Slavonic tongues; Curtius, Corssen and a phalanx of others for the classical languages; Gesenius, Ewald, Olshausen, Renan for the Semitic family.

With the same enthusiasm and scientific vigor other scholars are working at less perfect but not less important languages which belong to the agglutinative and monosyllabic families.

Those who talk on glibly about words and their origin, should at least take the trouble to know that there is a science which has made of that subject a special study. Those who talk about diseases and pretend to cure them without caring to know what the science of medicine has to say about them, are called quacks. Is it unjust if manipulators of lunatic etymologies are dealt with in the same way?

Strange as it is, this science, which already

has attained such great results and changed entirely our views about language, has not as yet a name agreed upon by all scholars. Some call it "linguistic," and some "comparative philology," some "glottology," some the "science of language." The last two names are the best, as linguistic and comparative philology are rather misleading. In the course of this book we have sometimes adopted the term "comparative philology," because it seems more popular in England and America. We must not, however, confuse the science of language with philology. "Philology" is now applied in a very wide meaning: we call Roman, Greek, Indian philology the study of the "life" of the Romans, the Greeks, and the Indians; the study of their language, their literature, their religion, their art, their philosophy. The object of the science of language, on the contrary, is only language. This is its ultimate aim, while, for the philologist, language is only a means in order to understand literature, and the other manifestations of civilized life. The linguist studies the most humble dialects, with the same care as the most

noble tongues—the philologist studies only those languages whose literature is most eminent and artistic. Philology is an aristocratic science, while before the science of language every language is entitled to be studied as carefully as any other. Schleicher compares the linguist to a botanist, the philologist to a gardener. The botanist must be acquainted with all vegetable organisms, with their structure and the laws of their development; but the use of the plants, their practical or æsthetic value is nothing to him; the most beautiful roses, the most gorgeous Japan lilies interest him no more than the most obscure weeds. The gardener cares, above all, for the usefulness, the beauty, the color, the perfume of plants. He disdains the plants which have no practical or æsthetic value. If he cares to be acquainted with their structure and development, it is only for practical reasons. The same does the philologist: language for him is only a subordinate thing, only a means to get at other things, literature, art, etc., while the linguist does not look beyond the natural phenomenon, which is language.

We have thus seen what the science of language is ; with what methods it proceeds in its investigations ; how it has found the apparent confusion of languages and words to be ruled by certain laws not less than any other part of this universe ; we have observed how it dissects words, compares grammars, and studies the affinities and diversities of languages ; we have seen how little language was studied and its nature completely misunderstood for centuries ; how the discovery and study of Sanskrit, not yet one hundred years ago, made a science of language possible ; and how this science was worked out and carried to a high degree of perfection during the last fifty years. We can now more safely approach an important question which once used to be treated at the beginning of every book on languages, and discussed before any analytical investigation was undertaken—the question of the origin of language.

VI.

THE QUESTION OF THE ORIGIN OF LANGUAGE.

THIS question is so important, the religious, historical and anthropologic problems connected with its solution are so great, that we can not wonder that it has been taken up and ventilated, even in the early blossoming of human culture, and long before any reasonable foundation had been laid of a science of language. Nay, the more involved and mysterious appeared the nature of language, the more prone philosophers were to speculate about its origin. Thus we find, for instance, that none of the great thinkers to whom Greek philosophy is indebted for its loftiest flights, left this problem untouched. They could not, even if they would, because the process of language is too intimately linked with the process of reason, to make it possible to inquire into the nature of the latter without paying the former any con-

sideration. The opinions of Greek philosophers may be mainly divided into two classes; some asserted that language is a thing of nature, i. e., that there is a natural and necessary connection between a thing and its name. Others affirmed that language is purely conventional; that a certain thing had received a certain name merely because it had pleased men to call it so.

The first opinion we may safely say is wrong. Since nature is universal, if there were any natural necessity why a horse must be called a "horse," how is it that it has different names with different peoples? As for the second opinion, it is to be observed, that it had only a negative value, inasmuch as it discarded any natural and necessary link between an object and its name. But here its merits end; if we ask, how then things came to have their names, the authors of this theory do not give any answer, or if they try to give it, it is simply to stumble about into vague and baseless suppositions.

Besides, both of these theories were *a priori* constructions; they had not been reached through well ascertained facts, but were

simply the offshoot of subjective and abstract speculations. The linguistic theories of Greek philosophers bore the same weight of scientific truth as the theories of the geographers of old about the form of the earth, the existence or non existence of people at the antipodes, etc. Those theories might have been either right or wrong ; but how could we tell which, until bold adventurers went round the earth and reported what the facts actually were? Modern linguists did for the science of language exactly what the early navigators did for geography. They brought to our knowledge the actual facts, thus enabling us to test the theories of the ancients and to formulate new ones, to say the least, not so distant from truth.

Before proceeding to inquire what light glottology has thrown upon the origin of language, let us remember that, outside the pale of metaphysics, we have two kinds of facts to deal with, physical and historical. When it is a question of a fact of the former kind, for instance of the existence of men at the antipodes, there is no other way of ascertaining the truth than by taking actual and

physical cognizance of it. For the ultimate proof of a physical fact we must resort to the testimony of our senses. But where it is a question of historical facts, we can not have such direct evidence; we can only from other historical facts and circumstances gather an inductive conclusion about their having or not having taken place, and in one way rather than in another. That once there was in Rome a man whose name was Julius Cæsar, that this man had been a great general, that he was killed by a handful of conspirators, all this we gather from historical circumstances. We have not seen him, we never shall see him; still we are as sure of his having existed as we are of the existence of another great general who was called Napoleon the First. But that that Roman general really partook in a conspiracy led by one Catilina, and that one of his murderers killed himself, and before dying exclaimed: "O Virtue, thou art but a name!" of all this we are not so sure as of the existence of Cæsar, because the historical proofs are not so strong as in the former case. We are sure of Rome having been once the capital of a great empire,

but we are not so sure, and it is impossible for us to ascertain the truth, as to how Rome was founded and by whom.

Whatever idea we may hold about the origin of language, we can not possibly hope to have a direct, sensuous proof of this fact, but merely an inductive one, just as of any historical fact. And in order to arrive at it, we must assume a postulatam which is the foundation of all historical researches :—that the natural laws (both of mind and body) which now govern our life, have always governed human life since its beginning. Should we deny this postulatam (but nobody does and nobody can), we should give up in despair all hope of acquiring knowledge and any idea of culture.

The consequence is that in order to analyze and explain historical facts we must look at what happens in the present day. As the geologist explains the formation of the earth by the laws which even now govern its development, the historian explains the facts of the past by the laws and criterions which preside over the events of to-day. In the present is the key of the past.

So it is that the best way to reach a probable opinion of how language originated in antiquity, is to study how language is formed nowadays around us. This we can only observe with our children, and with some tribes in the lowest state of savagery. Let us begin by children. Of course the case is not exactly the same as with our ancient, speechless forefathers, inasmuch as children are surrounded by people who speak, and are willing to teach them their own language. Nevertheless some observations thus gathered will supply a clue, so to speak, by which we may conjecture how languages were formed in the remote ages.

Sayce quotes an experiment of Taine, the French savant, which is so interesting that I ask permission to report it *in extenso*.

The experiment was with one of Taine's children, a little girl, of whom he notes that "the progress of the vocal organs goes on just like that of the limbs; the child learns to emit such or such a sound as it learns to turn its head or its eyes—that is to say, by gropings and repeated attempts. . . . At about three and a

half months, in the country, she was placed on a carpet in the garden; lying there on her back or stomach for hours together, she kept moving about her four limbs, and uttering a number of cries and different exclamations, but vowels only, no consonants; this continued for several months. By degrees the consonants were added to the vowels, and the exclamations became more and more articulate. It all ended in a sort of very distinct twittering which would last a quarter of an hour at a time, and be repeated ten times a day.

“ She took delight in this twitter ‘like a bird’ but the sounds, whether vowels or consonants, were at first very vague, and difficult to catch. Her first clearly articulated sound was *mm* made spontaneously by blowing through the lips. The discovery amused her greatly, and the sound was accordingly repeated over and over again. The next sound she formed was *kraaau*, a deep guttural made in the throat, like the gutturals so characteristic of Eskimo; then came *papapapa*. These sounds, which were at the outset her own inventions, were fixed in her memory by being repeated by

others, and then imitated many times by herself. As yet, however, she attached no meaning to any of the words she uttered, though, like the dog or the horse, she already understood two or three of the words she heard from the lips of those about her. Thus from the eleventh month onward she turned to her mother at the words 'where is mamma?' which, be it observed, is a polysyllabic sentence. But a month later the great step was made which divides articulate-speaking man from the brutes. The word *bébé* had now come to signify for her a picture, or rather, 'something variegated in a shining frame.' During the next six weeks her progress was rapid, and she made use of nine words, each with a distinct, though wide and general meaning. These were *papa*, *mama*, *tété*, 'nurse,' *oua-oua*, 'dog,' *koko*, 'chicken,' *dédé*, 'horse or carriage,' *mia*, 'puss,' *kaka* and *tem*. Besides these, *bébé* also continued to be employed, though its meaning was enlarged to signify whatever wets. It will be noticed that most of these words are reduplications, that only one of them is monosyllabic, and

that three at least are imitations of natural sounds. They were used, too, as general terms, not in the sense of a single individual only, but of all other individuals which seemed to the child to resemble one another. M. Taine observed that the guttural cry of the chicken, *koko*, was imitated with greater exactness than was possible for grown-up persons. The word *tem* was probably a natural vocal gesture, though it might have been a rude representation of *tiens*. In any case it was used in the general sense of 'give,' 'take,' 'look'; in fact, it signified a desire to attract attention. It had been first used for a fortnight as a mere vocal toy, without any meaning being attached to it, and after a time was left off, no other word taking its place. Meanwhile, by the seventeenth month, several new words had been learned, including *hamm*, which the child employed to signify 'eat' or 'I want to eat.' This word was her own invention, the merely natural vocal gesture of a person snapping at something. But the guttural and labial force with which it was pronounced gradually disappeared and the word was finally reduced to the nasalized *am*."

It would hardly be possible to state in a clearer and more complete way all the phenomena which accompany the beginning of speech. We have in ourselves by nature (and this constitutes the real and exclusive attribute of man) the faculty of speech, as we have the faculty of walking. And we exercise the faculty of speech for just the same reasons as we exercise the faculty of walking: that is, from a natural impulse, and because of want. We walk because we feel this natural, uncontrollable impulse to exercise our power of motion, and because we want to get our food and every thing necessary for us. We speak because we have a natural uncontrollable power and tendency to speak, and because we want to communicate with our fellow-beings.

So the child, even before understanding the sounds she utters, at the same time that she moves about her four limbs, "utters a number of cries and exclamations," but at first the easiest sounds, only vowels; and we know of savages in whose languages consonants have almost no value; with them language rests almost entirely on vowels. Then the child uses

some gutturals, then tries to imitate the act of eating by uttering *mm*. Then other sounds come, some imitative, like *koko*, *oua-oua*, and then other words. Their meaning is at first fluctuating and uncertain, but by and by it becomes more clear and specific; the child begins to distinguish.

Another very important fact is to be noticed: the words which the child begins to utter are properly neither roots, nor nouns, nor verbs. They are all this at one time; in fact, they are *all one sentence* in one sound. So *amm* or *mm* to the child means "food," as well as "to eat," and also, "I want to eat," "I will eat." The same fact occurs with the rudimentary languages of inferior tribes: the unit of speech is not a word, a noun or a verb, but a sentence. This seems to solve reasonably a problem, which for a long time has been agitated by linguists, whether language began by nouns or by verbs, that is, whether the primitive meaning of roots was a single object or an abstraction. The example of children and uncivilized peoples—children in the history of mankind—seems to authorize us to say that language

began with neither of them: the initial unit of speech was a sentence—an imperfect, rudimentary sentence. Out of this sentence grew the distinction between the subject and the predicate by that process of differentiation which presides over the development of the whole universe. This is not the place to follow this argument further, but any one will see for himself how greatly it must tell on our ways of conceiving grammar and on our doctrines of logic.

It was once an argument of controversy, whether language was due to *onomatopœic process*, that is, to attempts to imitate with articulate sounds the sounds of things external; or to the *interjectional process*—that is, to unconscious exclamations, which man uttered at the sight of external objects. According to the first theory, language was in a certain way brought home to us by the sounds of the universe around; by the second theory, language sprang up from our own innermost being, out of a pressure, so to speak, of our own ideas and sensations. But all this antithetic architecture of systems is more ingenious than true. We have

no reason to separate these two elements ; both of them concurred in the formation of speech. Moreover, we must remember that our vocal organs do not work alone in the formation of language. Spoken language is not *all* the language. We speak with our hands, with our eyes, with our whole body. Philology, of course, studies only *sound-language* ; but in investigating the *origin* of language, we must take in consideration *all* the forces, *all* the elements which can assist man in conveying his ideas, in laying his mind open to his fellow-beings, which is the scope of language. And when we consider how many forces are brought into play in the formation of language, we see how futile it is to confine its origin to the use of only one organ, and in only one direction.

As language is due to our need of communicating with our fellow-beings, and as our own words must be understood by them, as well as theirs by us, it follows that language is not the work of individuals, but of society. Language is a social phenomenon. No language is possible except where society exists, however low and rudimentary. And just in proportion as a

society is complex, high and cultivated, its language is rich and highly developed.

Another question remains to be considered. Language developed slowly, through ages and ages, from rude and formless elements, such as we observe in children and savages. But were there many *centres* from which language was developed, or have all the languages of the world been developed from one *centre* alone, from one and the same source? As far as we can tell, all analogies point to numerous *centres*, in each one of which, according to the race, the climate and other peculiarities, a different language was brought forth. The further we go back in the history of language, and the lower we descend in the scale of civilization, the greater is the variety of languages we meet with. The child of M. Taine developed some rudiments of language, while another child, in conditions slightly changed, would develop quite another rudimentary speech. Among savages each little tribe, separated as they are one from another, has its own language. Moreover, as there is no strong institution like an organized

government, a system of religion or literature, to fix and steady the language, their language is like a stream of water without banks: its course is forever changing. Missionaries testify to tribes whose languages were subject to such a rapid transformation as to make a dictionary, which had been composed fifty years before, entirely worthless. It is civilization, with the help of such forces as government, religion, literature, common education, commerce, and of great inventions like the press, which fixes a language, and by binding many provinces into one great state causes many and different dialects to be superseded by one national language. Without the press, commerce and public schools, the language of the United States would now differ more widely from the language of England than Dutch from German, or Italian from French.

Another question closely connected with the origin of language is the relation between language and thought. It is a common saying that without language no thought is possible. There is some exaggeration in this aphorism. Thought properly exists before language. It

is because we have an *idea* that we make a word or give an old word a new meaning. We invent a new machine, we have the idea of it, and still we do not know yet how to name it. After some consideration we agree upon a name ; but the *idea* was first. Were a savage to see a locomotive, he would not know what it was ; very probably he would conceive of it an idea absolutely inadequate, and, according to this idea, he would name it. He would perhaps call it "flying fire," or something of the kind. Thus when we reach some new idea either in mathematics, or metaphysics, or any other science, we try to find out a name for it. In any case thought precedes language ; language is not to be confused with thought ; it is but an *instrument* of thought. But withal we must not underrate the importance of language in this respect. If language is not thought, it is, however, such a powerful auxiliary that thought without it would be little better than a helpless cripple. Had we no means of expressing our ideas, no consecutive reasoning would be possible : because we can have an idea without expressing it ; but we

can not form a simple ratiocination without putting it into words, whether uttered or unspoken. We have eyes and powers of vision, but we can not look at our face without the aid of a mirror; in the same way, we can not look into ourselves, we can not be conscious of our mental power, without the help of language.

Finally, before leaving this argument on the origin of language, one question remains to be answered. We said that we have a natural faculty of speech. It is obvious to ask: where is such faculty? This question transcends the limits of philology; it is for the biologist to answer it. The French anthropologist, M. Broca (quoted by Sayce), localizes the faculty of speech in a very circumscribed portion of the two cerebral hemispheres, and more especially of the left. These two hemispheres are distinguished in their under side into three lobes: the posterior, the middle and the anterior. The two latter are separated from one another by what is called the Sylvian fissure. It is on the upper edge of this fissure that M. Broca places the seat of the faculty of speech. "Aphasia (want of speech), he finds, is invari-

ably accompanied by lesion or disease of this portion of the brain. The lesion occurs in the left hemisphere in about nineteen out of twenty cases, and though the faculty of speech is sometimes not affected even by a serious lesion of the right hemisphere, it has never been known to survive in the case of those whose autopsy has disclosed a deep lesion of the two convolutions of the right and left hemispheres."

VII.

COMPARATIVE MYTHOLOGY.

IT may now be hoped that the reader is persuaded that the science of language, although it professes to deal merely with words, is not so unimportant a science as it might seem at first.

After the human mind, language is the most powerful organ of civilization, and a scientific study of language can not but touch upon questions of the most vital importance to mankind. As we have just seen, if language is not thought, it is at least its most powerful instrument, its most immediate index; and the study of the development of language is most closely connected with the development of the human mind. Besides, language has a historical importance which no other human fact can claim for itself. Strange as it may seem, this invisible breath, which we utter in organic

sounds, is far stronger than aught that we can raise of stone or bronze. The Egyptian pyramids will have long been ruined, crumbled into dust, and dispersed by the winds of the desert, when the scholars of generations to come will still be studying and analyzing, with even better results perhaps than our own, the words uttered by the forefathers of the men who raised those monumental structures.

In the history of our race we go back a certain distance by the help of books, and other monuments, but at last we reach a point where there are no books, no monuments, no pyramids, no temples ; where not a stone is left to mark our way further into the mist of the past. But then, when every other help fails, language remains to us ; we can rebuild the languages of peoples, who, centuries ago, were swept from the face of the earth, and by the fragmentary debris of their language we can still catch a glimpse of their modes of life, of some of the most notable events of their history, of their origin, and of their fate.

This wonderful work of reconstruction has been carried on, to a certain extent, for the

Indo-European family. Although the mother tongue, from which these languages are derived, is dead, we see by the evidence of these same languages that it was spoken by people who lived more than 3,000 years ago. The original abode of this primitive people must have been in the north-eastern part of the Iranian table-land, near the Hindu-kush mountains. It seems there were several distinct tribes, and the language had several local varieties, or dialects. These varieties grew more and more important, especially after the tribes had left their ancient abode and scattered themselves over Europe and Asia, until they assumed the aspect of languages which at first seem to have no connection.

Again, by the evidence of the Aryan languages, we see that the people who spoke the Aryan mother tongue, was not nomadic, but "hadsettled habitations, even towns and fortified places, and addicted itself in part to the rearing of cattle, in part to the cultivation of the earth. It possessed our chief domestic animals—the horse, the ox, the sheep, the goat, and the swine, beside the dog; the bear and the

wolf were foes that ravaged its flocks; the mouse and fly were already its domestic pests.

“The region it inhabited was a varied one, not bordering upon the ocean. The season whose name has been most persistent is the winter. Barley, and perhaps also wheat, was raised for food, and converted into meal. Mead was prepared from honey, as a cheering and inebriating drink. The use of certain metals was known; whether iron was one of these admits of question. The art of weaving was practiced; wood and hemp, and possibly flax, being the materials employed. Of other branches of domestic industry little that is definite can be said; but those already mentioned imply a variety of others, as co-ordinate or auxiliary to them. The weapons of offense and defense were those which are usual among primitive peoples—the sword, spear, bow and shield. Boats were manufactured, and moved by oars. Of extended and elaborate political organization no traces are discoverable—the people was doubtless a congeries of petty tribes, under chiefs and leaders rather than kings, and with institutions of a patriarchal

cast, among which the reduction to servitude of prisoners taken in war appears not to have been wanting.

“The structure and relations of the family are more clearly seen; names of the members, even to the second and third degrees of consanguinity and affinity, were already fixed; and were significant of affectionate regard and trustful interdependence. That woman was looked down upon as a being in capacity and dignity inferior to man we find no indication whatever.

“The art of numeration was learned, at least up to a hundred; there is no general Indo-European word for “thousand.” Some of the stars were noticed and named. The moon was the chief measurer of time.

“The religion was polytheistic, a worship of the personified powers of nature. Its rites, whatever they were, were practiced without the aid of a priesthood.”—*Whitney*.

Thus it is that by the help of words we can penetrate into the history of the most civilized peoples, as the Greeks and the Romans, into their languages, into many phases of their life,

far deeper than they themselves were able to do. As for their origin, we know positively where they came from, just as we know who our own ancestors were, while on this subject they had to be satisfied with vague and fantastic imaginings, without any means whatever of ascertaining the truth. Their mythology was to their philosophers and poets—and always has been since to every scholar—a great riddle, which they tried in vain to solve. Now, thanks above all to the science of language, the researches, not only in Greek and Roman, but in all the Indo-European mythology, have entered upon a new and sure path, where every step is at once a conquest and a help toward ulterior victories.

The ancient and modern theories about the origin of the mythology of Hellas and Rome may be reduced to three. Some sneered at those fanciful creations and thought they had been invented by shrewd men in order to teach the multitude to behave themselves; which is rather hard for us to understand, when we consider that all kinds of wrongful acts, passions, and vices were attributed to most of those

gods. Another school pretended to see in mythological fables merely a veil which covered events that had really taken place, and years of toil were spent, and enormous volumes published, in order to show what hero, or king, was hidden under the names of Jupiter; who was Æacus; where did Saturn live and reign. The third school held also that mythology veiled historical events, but they had a particular tendency to look at Greek mythology as a mere disguise of the facts of the Old Testament. Thus they recognized Noah and Noah's three sons, Shem, Ham, and Japhet, in Saturn and his three sons, Jupiter, Neptune, and Pluto. Vulcan was identified with Tubal Cain, Typhon with Og. One writer pretended that the Odyssey was an exposition of the history of the patriarchs, the emigration of Lot from Sodom, and the death of Moses, while the Iliad told of the conquest and destruction of Jericho! Of course, there is not the least fact to buttress up such extravagant opinions, and all this ingenuity was simply wasted. The science of language has the great merit of having established this fact, that, given a fam-

ily of peoples descended from a common stock, as we can not explain their words without comparing them one with the other and without going back to the common source from which those different words sprung ; so when we study the growth of mythology with kindred peoples, it is a sheer waste of time to try to explain those various myths without resorting to comparison, without contrasting the various forms which each myth assumes with each one of those peoples, so as to find by means of these comparisons which is the simplest of all those forms, where the myth comes from, and how it was successively developed.

With reference to Greece and Rome, it has always been known that Latin and Greek were two cognate languages ; but what their mutual relations really were, and what their origin, it was not possible to ascertain, so long as we remained in Greece and Rome. We had to go out of that field ; we had to take in another term of comparison—Sanskrit—and then the structure of Latin and Greek, their origin and mutual relations, could be found and defined in all certainty.

It is the same with mythology. Greek and Roman mythology never could be explained without resorting to comparisons with the mythology of cognate peoples. Luckily, what Sanskrit has proved to be for Latin and Greek, Indian mythology is for the Greek and Roman Olympus. Thanks to the Vedas, the most ancient product of Indian literature, we can surprise, so to speak, mythology in its growth, and thence follow it to Greece and Rome, and to the other branches of the Indo-European family.

Unfortunately, those studies are rife with difficulties, and, having been undertaken only of late years, the harvest of positive results which they have yielded is not yet very large. But it is continually increasing, and it is to be hoped that it will be great and conspicuous ere long.

Meanwhile, some highly noteworthy facts have been acquired and, what is most important, we now know how the *myth* is formed. Although, it is difficult to follow it in its growth, and although scholars are sometimes apt to disagree about many facts incident to its life,

still we are able to tell how it is born. This is a great achievement. When the source of a river is discovered, it is reasonable to hope that we will succeed before long in finding its course, its branches, and every thing about it.

The growth of the myth is like a particular kind of metaphor. The original meaning of a word is lost, one of its metaphorical meanings is exaggerated far beyond its original signification, and around this latter meaning a legend grows up, which constitutes a myth. For instance, as Max Müller so well explains, nothing is so natural, especially to a primitive people, as to speak of the sun's rays, which seem to play with the foliage of the trees and caress the mountain tops, as the arms or hands of the sun. We must not wonder then at reading in the Vedas, that the sun was called, among other epithets, "the golden-handed." Nothing is more natural and more easy to explain. But by and by, this simple and natural reason for the epithet, "golden-handed," was forgotten: the sun was spoken of as a person, as a God, who carries gold in his hand and showers it upon his pious worshipers. Nor does the popular imagination

stop here : we find in the commentaries to the Vedas, a story that the sun had lost one of his hands, and the priests had replaced it with a golden one. Later the sun, under the name of Savitar, becomes himself a priest, and we read how once in performing a sacrifice he cut off his hand, and the other priests made a golden one for him.

Take another case ; *Marut* in Sanskrit means " wind," and there is nothing extraordinary in saying that the wind sings. Such expressions are familiar in all languages. But in the Vedas we find that the *Maruts* are transformed into singers. They are " musicians."

The most important God of the Greek and Roman Olympus had no dissimilar origin. The Greek *Zeus*, the Latin *Jovis* (or *Iu*, Ju-piter), *Dyaus* in Sanskrit, *Tiw* in Anglo-Saxon (preserved in *Tiwsdoeg*, Tuesday) are all traced back by comparative philology to the root *diu* which means " to beam," " to shine," and it was used especially to denote *sky* and *day*. At the start, then, Zeus and Jove meant nothing but the sky; but this primitive meaning of the word by and by was lost, and Zeus and Jupiter became the

giver of the rain, the source of light, the maker of the seasons, the ruler of the world.

The great personality of Prometheus, the deep meaning attributed to it by Greek poets, the works of art that illustrate it all over the world, are known to every body ; yet this great myth, if we trace it back to India, has a very humble origin. *Pramantha*, the Indian name of Prometheus, was but a stick, which, by rubbing against another stick, was made to give heat and *fire*—the only way this, of getting fire with a primitive community. The root *manth*, from which *Pra-mantha* comes, means to agitate, to shake quickly ; a meaning which fits perfectly the first condition of *Pramantha*. But the root *manth* means also to *draw out*, to *steal*. Hence *Pramantha* came to be thought of as a “stealer of fire;” hence, the whole legend—which did not reach its utmost complexity until it was elaborated by Greek fancy—of the giant stealing the fire from Heaven, the consequent wrath of Zeus, and the martyrdom of Prometheus. Prometheus was all the dearer to the people inasmuch as the origin of fire was naturally connected with the origin and progress

of every useful art, and Prometheus was therefore looked upon as the greatest benefactor of mankind.

I do not pursue these mythological disquisitions any further, as most myths can not be explained satisfactorily without bringing in many linguistic facts which would transcend by far the limits of this work. But these brief hints are enough, I hope, to show in what light now the growth of mythology is regarded, and how this branch of human research has been entirely renovated by the science of language. Of course, we must not forget another powerful factor of mythology: that tendency, common especially to uncultivated minds, to see personal forces at work in all the phenomena of the universe. But this same tendency would go a very short way, were it not helped in its course by the metaphorical use of words, which alone can give shape to the personifying tendencies of our minds.

So that, after all, the history of mythology is in great part a history of words. Words, metaphorically used, and whose original meaning is lost, give rise to legends in keeping with

their new meaning and with the tendency of primitive, uncultivated minds to see in natural phenomena those same forces, whose working they feel within themselves. This mythological process is not different after all from what has taken place in historical times, nor from what is going on daily around us. The history of the middle ages is full of astonishing legends, built entirely upon words, and more surprising even than the stories of ancient mythology. The name of the city of Rheims in France, for instance, gave rise to a legend widely spread over Europe, that that city had been founded by Remus, the brother of Romulus, and we read in many medieval chronicles that afterwards Remus went to Rome, and the enmity between the two brothers grew out of the jealousy of Romulus because of the great prosperity of the city founded by his brother.

The names of almost all the German princes and barons were traced back by medieval writers to Roman families, and stories *ad hoc* of their descent, of fabulous migrations and deeds, were easily invented and currently believed.

The "Legenda Aurea" says of St. Christo-

pher: "He would not serve any body who had himself a master, and when he heard that his lord was afraid of the devil, he left him and became himself the servant of the devil. One day, however, when passing a cross, he observed that his new master was afraid of the cross, and learning that there was One still more powerful than the devil, he left him to enter the service of Christ. He was instructed by an old hermit, but being unable to fast or to pray, he was told to serve Christ by carrying travelers across a deep river. This he did until one day he was called three times, and the third time he saw a child that wished to be carried across the river. He took him on his shoulders, but his weight was so great that he could hardly reach the opposite shore. When he had reached it, the child told him he had carried Christ himself on his shoulders, in proof whereof his stick, which he had used for many years, when planted in the earth grew into a tree."

There is not a shadow of truth in this legend ; even sacred writers agree that it sprung up entirely from the name of the saint, "Christopher," which means "he who carries God,"

(from the root *fer*, to carry,) namely in his heart. But the name was taken in a material sense and the legend was invented to explain it.

Sayce relates how a "housekeeper used to point out a Canaletto to visitors with the remark that it was 'a candle-light picture, so-called because it could not be seen to best advantage during the day,' and what this good housekeeper did on a small scale, mankind has always been doing on a large scale."

A snow lake on the top of the Swiss mountain Pilatus is said to have been the place where the unworthy Roman proconsul found his death; and horrible descriptions were spread abroad of that pretty lake. The name of the mountain has nothing to do with Pilate; it was called *Pilatus* from Latin *pileum*, "cap," whether they meant the cap of clouds or the cap of snow which crowns it.

Closely connected with comparative mythology is the science of religions. Religions may be divided into two classes: those that have been organized into a system, and those that have not. The religions of the latter class are in reality a mere ensemble of mythological

tales, and in order to explain them we must resort to the science of language, as we have seen. Religions of the former class rest on sacred books which also can not be satisfactorily explained without the help of comparative philology. So that in either case, the science of religions rests on the science of language. Of course, the intuition of the divine, the sense of the infinite, which constitutes the soul of all religion, lies outside the pale of science. But the various forms in which different peoples have conceived divinity, the various ways in which they have represented it, may be the object of scientific investigations. The science of religions will be one of the greatest offsprings of the science of language, since nothing is so interesting as to follow step by step, comparatively and historically, the toilsome path by which poor struggling humanity has risen to an ever higher conception of the Divine.

Leaving Christianity aside—from the serpents and stones and beasts worshiped by the savage, to the beautiful genial inhabitants of the Greek Olympus, what a long way! what a long course of centuries is required to bridge over

such an abyss! Would it not be highly interesting, would it not throw a great light upon human nature, if it were possible to follow, step by step, the way trodden by mankind from one of these extremities to the other? Undoubtedly it would; and it will be possible too, but solely through the science of language. The work is as vast as it is important; a long time will be requisite before all possible results can be obtained; but it is fairly begun, and scholars of all nations toil on at it laboriously and hopefully.

Another science which owes its origin to the science of language is known by the name of folk-lore. It studies particularly all those legends and stories which are current among the people, and those tales which are the special heirloom of nurseries and in which children revel.

Once these legends and tales were looked down upon as mere nonsense, fit only to amuse children and decrepit old people. But since they have been studied in the light of comparative philology, treasures of ethnological, historical and linguistical information have appeared hid-

den in them, which at first it would have been temerity even to suspect. The tales with which mothers and nurses amuse children, and which fill them with terror, or light up with merriment familiar gatherings around the fireside, all the world over, are not the inventions of the mother, the nurse, or the story teller; they belong to a large patrimony, common to all branches of one race, sometimes even to different races. They have traveled from afar; many of them have come down to us from our forefathers in the central plains of Asia; they have accompanied them in their migrations all over Europe and Asia; they have changed with the language, the religion, and the surroundings; but in substance they have remained the same. To-day we can take a story told to English children by their nurses, compare it with the same story, slightly changed, as it is told to French, German, Italian, Russian, and Indian children, and go back to the source from which the story came, or at least, to a very ancient version in which it was first told.

These comparative studies in folk-lore are not

without great importance: they throw no little light upon the relations of the different branches of mankind, and their history, and upon the psychic development of nations; and they teach us, more forcibly perhaps than any other science, the fundamental unity of human nature. It has been said with reason that "an exhaustive account of the folk-lore of the world would be equivalent to a complete history of the thoughts of mankind."

VIII.

LANGUAGES AND RACES — LOCAL AND FAMILY NAMES.

“Names are enduring — generations come and go Nomenclature is a well in which as the fresh water is flowing perennially through, there is left a sediment that clings to the bottom.”—C. W. BARDSLEY.

AMONG the most important questions which present themselves to the mind of the student of language, is that of the connection between peoples and languages. In the beginning of the science of language some students, not entirely free from that over-enthusiasm which is a great strength as well as a fruitful cause of mistakes with all pioneers, went so far as to identify the idea of race and language, and to hold that peoples who speak the same language belong to the same race, or the same family. A great part of the political movements which in this century have changed the face of Europe, have been prompted by the idea of nationality. Europe aspired, and still aspires to be organized according to nationali-

ties, which is considered a natural organization as contrasted with the artificial divisions dictated by diplomacy. But on what ground was placed the differentiation of nationalities? Mainly on language. Germans were said to be the peoples who speak German; French those who speak French; Italians those who speak Italian. But whoever has followed our previous reasonings can easily judge for himself of the real value of such claims. Language is entirely distinct from race. As an Indian child brought up in England learns English as his own natural language, so a community belonging to one family of peoples may, and many times do, learn and speak and use exclusively a language belonging to quite a different family. France, which is mainly of Celtic and Germanic blood, speaks a Latin language; while in the veins of the peoples who speak Italian flows a great amount of non-Latin blood. Celtic Ireland speaks English, a Teutonic language. History is full of such instances, and to assume that peoples belong to the same family merely because they speak cognate languages is against all historical evidence.

We must not, however, underrate the value of language for ethnological researches. If relationship of language does not prove *absolutely* relationship of blood, it has still great weight. If other characteristics concur, and positive historical facts are not against it, then relationship of language may be supposed to afford a conclusive proof. Besides, we must remember that when a community came to change their own language for another, there generally is historical evidence of such fact; so that, when such historical evidence is wanting, relationship of language is by itself, if not a proof, at least a strong presumption of relationship of blood.

If we go back to the mists of earliest history, nothing helps us so much as the science of language to discover and follow the tracks of the great migrations of races which first peopled Europe and superseded each other, or mingled together, long before they were civilized enough to preserve and hand down to posterity the records of important events. The monuments of those ages which can be utilized by the ethnologist are extremely scanty; records, properly historical, are missing

entirely; nothing remains but fragments of speech. By the aid of these, the science of language can take us back to ages where both history and ethnology are equally silent, and can show us by what races the ground of Europe has been successively trodden; how they forced one another away from their places, or how they settled and mingled together. Thus it is that by the help of these linguistic materials we can discern the nationality of the migratory tribes which move in the early history of Europe, better even than the Romans who came in contact with them, and a few fragmentary words enable us to correct the mistakes of Julius Cæsar.

Treasures of historical and ethnological information lie hidden in local names, which have persisted through centuries down to our days, and that branch of the science of language which is devoted to the study of local names is one of the most interesting of all. We daily pronounce the name of some river, or mountain, or city, without ever pausing to ask why they should be called by such names. Who has ever asked himself what *London* means? or

Paris, or Berlin? Where do the names of our rivers come from? Who named them? Such names can not be the work of nature; they have been bestowed by men. And if men are reasonable beings, we must assume that there was a reason why such city, or river, or mountain, or country was called by such or such a name. In other words, local names, however obscure and meaningless they may appear to us, must have had a meaning; a meaning which was clear to those by whom such names were first bestowed. Even the uneducated feel, as by instinct, that it must be so, since they display an uncheckable tendency to etymologize about local names. But it was for the science of language to study in a systematic way the formation of local names, to bring forth their true value, both linguistic and historical, and in many cases to find out their primitive meaning, although hidden by centuries of unwritten history, and sometimes disguised by false etymologies and fanciful legends. In this way local names are made to throw not a little light upon events long forgotten, or very dimly remembered, migrations of peoples, and mem-

ories of races afterward swept from the country.

Under the title, "Words and Places," Isaac Taylor, the learned author of the History of the Alphabet, has summed up, in a plain and at the same time comprehensive way, the main results of recent philological researches concerning local names in Europe, and in England in particular.

In the first place, in order to understand better what happened centuries ago, let us glance at what has been going on in recent times, where facts can be easily ascertained.

If we look at a map of America, we find names derived from a dozen languages. First we have scattered Indian names; like the Potomac, Niagara, Allegheny, etc. "These names are very sparsely distributed over large areas, some of them filled almost exclusively with English names, while in others the names are mostly of Spanish or Portuguese origin—the boundary between the regions of the English and Spanish, or of the Spanish and Portuguese names, being easily traceable. In Louisiana and Lower Canada we find a predominance of French names, many of them

exhibiting Norman and Breton peculiarities. In New York we find, here and there, a few Dutch names, as well as patches of German names in Michigan and Brazil. We find that the Indian, Dutch and French names have more frequently been corrupted than those derived either from the English or from the Spanish languages. If we were entirely destitute of any historical records of the actual course of American colonization, it is evident that, with the aid of the map alone, we might recover many most important facts, and put together an outline, by no means to be despised, of the early history of the continent; we might successfully investigate the retrocession and extinction of the Indian tribes—we might discover the positions in which the colonies of the several European nations were planted—we might show, from the character of the names, how the gradually increasing supremacy of the Anglo-American stock must have enabled it to incorporate, and overlay with a layer of English names, the colonies of other nations, such as the Spanish settlements in Florida and Texas, the Dutch colony in the neighborhood of New

York, and the French settlements on the St. Lawrence and the Mississippi.

“The same thing that happened with local names in America, took place in Europe, where we can, with their sole aid, follow the migrations of the Celts, the Teutons, and all the most important races.

“Wilhelm von Humboldt was one of the pioneers in this new science of etymological ethnology. On the map of Spain, France and Italy, he has marked out, by the evidence of names alone, the precise regions which, before the period of the Roman conquest, were inhabited by those Euskarian or Iberic races, who are now represented by the Basques—the mountaineers of the Asturias and the Pyrenees.

“By a similar process Prichard demonstrated that the ancient Belgæ were of Celtic, not of Teutonic, race, as had previously been supposed. So cogent is the evidence supplied by these names, that ethnologists are agreed in setting aside the direct testimony of such a good authority as Cæsar, who asserts that the Belgæ were of German blood.

“Archdeacon Williams, in like manner, has

indicated the limits of the Celtic region in Northern Italy, and has pointed out detached Celtic colonies in the central portion of that peninsula. Other industrious explorers have followed the wanderings of this ancient people through Switzerland, Germany and France, and have shown that in those countries the Celtic speech still lives upon the map, though it has vanished from the glossary."

For England, "this method has afforded results of peculiar interest and value. It has enabled us to detect the successive tides of immigration that have flowed in; as the ripple-marked slabs of sandstone record the tidal flow of the primeval ocean, so wave after wave of population—Gaelic, Cymric, Roman, Saxon, Anglian, Frisian, Norwegian, Danish, Norman and Flemish—has left its mark upon the once shifting, but now indurated sands of language. The modern map of England enables us to prove that almost the whole of England was once Celtic, and shows us that the Scottish lowlands were peopled by tribes belonging to the Welsh, and not to the Gaelic stock. The study of Anglo-Saxon names enables us to trace

the nature and progress of the Teutonic settlement, and to draw the line between the Anglian and the Anglo-Saxon kingdoms; while the Scandinavian village-names of Lincolnshire, Leicestershire, Caithness, Cumberland, Pembrokeshire, Iceland and Normandy, teach us the almost forgotten story of the fierce Vikings, who left the fiords of Norway and the vics of Denmark to plunder and to conquer the coasts and kingdoms of western Europe."

In these researches, names of rivers and mountains are of the greatest value; since great rivers generally mark the course of emigration, and "mountain fastnesses have always formed a providential refuge for conquered tribes."

We can follow, by the aid of the map, the progress of the Phœnicians, and the triumphal march of the Arabs. Spain is all dotted with Arabic names, thick near the shores, but which become less and less numerous the more we progress toward the mountains, until they disappear almost entirely in Galicia and the Asturias, the extreme northern part of the peninsula. There are many Spanish rivers

whose names begin by *guad*. In Palestine and Arabia this word appears in the form of *wadi*—a ravine, a river. The name of the *Gaudalquivir* is a corruption of Wadi-l-kebîr, the great river—a name which is found also in Arabia. We have also the river names of Guadalcazar, which is Wadi-l-kasr, “the river of the palace”; Guadalhorra, from Wadi-l-ghar, “the river of the cave”; Guadarranke, from Wadi-l-ramack, “the mares’ river”; Guadalquiron, from Wadi-l-kitt, “the cat river”; Guadalaxara, from Wadi-l-hajarah, “the river of the stones”; Guaroman, from Wadi-roman, “the river of the pomegranate trees”; Guadalaviar, from Wadi-l-abyadh, “the white river”; Guadalupe, “the river of the bay”; Guadalbacar, “the ox river”; Guadaliman, “the red river”; Guadarama, “the sandy river,” etc.

We find the word *medina*, “city,” in Medina Coeli, Medina Sidonia, and three other Spanish cities. We find not a few names beginning by *cala* (Arabic *kal-ah*, a castle), or by *alcala*, which is the same word with the Arabic definite article prefixed.

Turning again to England, the results of

such researches are even more abundant. England has been said to be "the land of inclosures." In fact "an examination of English local names shows us that the love of privacy, and the seclusiveness of character, which is so often laid to the charge of Englishmen, prevailed in full force among the races which imposed names upon English villages. The universally recurring terminations *ton*, *ham*, *worth*, *stoke*, *stow*, *fold*, *garth*, *park*, *hay*, *burgh*, *bury*, *brough*, *borrow*, all convey the notion of inclosure or protection."

The primary meaning of the suffix *ton* (Barton, Burton, Shottington, Wingleton, Godington, Appleton), is to be sought in the Gothic *tains*, the old Norse *teinn*, and the Frisian *tene*, all of which mean a twig—a radical signification which survives in the phrase "the tine of a fork." The Anglo-Saxon verb *tynan* means "to hedge." Brushwood, used for hedging, is called *tinetum* in Low Latin. Hence a *tun* or *ton* was a place surrounded by a hedge, or rudely fortified by a palisade.

In most cases the isolated *ton* became the nucleus of a village; the village grew into a *town*.

The Anglo-Saxon *yard* and the Norse equivalent *garth* contain nearly the same idea as *ton*. Both denote some place *guarded* or *girded*.

Again the Anglo-Saxon *weortihg*, which appears in English names in the form of *worth* (Bosworth, Tamworth, Kenilworth, Walworth, Wandsworth, etc.), bears a meaning nearly the same as that of *ton* or *garth*. It denotes a place *warded* or protected, from the Anglo-Saxon *warian*, to ward or defend.

The suffixes *bury*, *borough*, *burgh*, *brough* and *burrow* are related to the Anglo-Saxon verb *beorgan*, and to the German *bergen*, to shelter or hide.

The suffix *ham*, which is very frequent in English names, appears in two forms in Anglo-Saxon documents. One of them, *hām*, signifies an inclosure, that which hems in ; the other, *hām* (German *heim*, English *home*), expresses "the sanctity of the family bond."

But "the most important element which enters into Anglo-Saxon names is the suffix *ing*. It occurs in the names of *more than one-tenth* of the whole number of English villages and hamlets, often as a simple suffix, as in the

case of Barking, Brading, Dorking, Hastings, Kettering, Tring, or Woking; but more frequently we find that it forms the medial syllable of the name, as in the case of Buckingham, Kensington, Islington, Haddington, or Wellington. This syllable *ing* was the usual Anglo-Saxon patronymic.

“Thus we read in the Saxon Chronicle (A. D. 547):

Ida waes Eopping,	Ida was Eoppa's son ;
Eoppa waes Esing,	Eoppa was Esa's son ;
Esa waes Inguing,	Esa was Ingwy's son ;
Ingui, Augenwiting,	Ingwy, Augenwit's son.

“In fact, the suffix *ing* in the names of persons had very much the same significance as the prefix *Mac* in Scotland, *O'* in Ireland, *Ap* in Wales. A whole clan or tribe claiming to be descended from a real or mythic progenitor, or a body of adventurers attaching themselves to the standard of some chief, were thus distinguished by a common patronymic or *clan* name. . . . The Saxon immigration was, doubtless, an immigration of clans. The subsequent Scandinavian colonization was, on the other hand, wholly or

mainly effected by soldiers of fortune." We can see this by Saxon local names which mostly refer us, by their ending *ing*, to a clan, while local names of Scandinavian origin are generally traceable to the name of a single individual.

It is very interesting to compare Anglo-Saxon names in England with those on the opposite French coast, where, between Calais, Boulogne, and St. Omer, the name of almost every village and hamlet is of the pure Anglo-Saxon type. It appears, by the analysis of these local names, that the Anglo-Saxon settlements in France were *filial settlements* of the Anglo-Saxons already established in England.

Not less instructive are the local names given by the Northmen. One of the most important suffixes in such names is *byr* or *by*. This word, which has the form *beor* or *bere* in Devonshire, *boer* in Iceland, originally meant an abode, a single farm ; afterward it came to denote a village (a *by-law* is a local law enacted by the township). " In the Danish district of England—between Watling Street and the river Tees—the suffix *by* frequently takes the place

of the Anglo-Saxon *ham* or *ton*. In this region there are numerous names like Grimsby, Whitby, Derby, Rugby, Kirby, Netherby, Selby, Ashby. In Lincolnshire alone there are one hundred names ending in *by*. To the north of Watling Street there are some six hundred instances of its occurrence—to the south of it, scarcely one. There are scores and scores of names ending in *by* in Jutland and Sleswic, and not half-a-dozen throughout the whole of Germany, and even these are found chiefly in the Danish district of Holstein."

Another suffix is *thorpe*, *thorp*, or *trop* (Althorpe, Copmansthorpe, Wilstrop), which means an aggregation of houses—a village; and is the Norse form of the German *dorf*, a village.

By the help of such suffixes we can follow the Northmen in their excursions, discover their settlements, and even distinguish between places which they visited for trade, and those which they visited for booty.

In the same way we can follow the course of that Celtic race which played so great a part in the colonization of Europe. They were divided into two great branches, both of which

have been pushed westward by the succeeding deluges of the Romanic, Teutonic, and Slavonic peoples. "In the geographical nomenclature of Italy, France, Spain, Switzerland, Germany, and England, we find a Celtic substratum underlying the superficial deposits of Romanic and Teutonic names.

"One class of local names is of special value in investigations relating to primeval history. The river-names, more particularly the names of great rivers, are everywhere the memorials of the earliest races. These river-names survive where all other names have changed—they seem to possess almost an indestructible vitality. Towns may be destroyed, the sites of human habitation may be removed, but the ancient river-names are handed down from race to race; even the names of the eternal hills are less permanent than those of rivers. In Germany, France, Italy, Spain, we find villages which bear Teutonic or Romanic names, standing on the banks of streams which still retain their ancient Celtic appellations. Throughout the whole of England there is hardly a single river-name which is not Celtic."

The Celtic river-names are of two classes: some mean simply water or river; others mean rough, gentle, smooth, white, black, yellow, or denote some other quality of the river. Celtic words meaning "water," "river," are *avon* (afon, aon, on), *dur* (dwr), *esk*, to which scores of names of rivers have to be referred.¹ Avon, Axona (Aisne), Seguana (Seine), Garumna (Garonne), Dour, Glasdur (gray water), Esky, Esker, Tem-ese (Thames) "the broad water."

Not only ethnological facts we can discover hidden in ancient local names; but sometimes they tell us also important news about the state of civilization with a certain people at a given period of time.

In England, for instance, it is an important fact that, while almost all names of villages are either Saxon or Scandinavian, the name for a road has been borrowed from the Romans. *Street*, as we have had occasion to mention, is the Latin *strata*, "paved roads." This fact testifies to the great constructive qualities of the Romans. They had not time to settle in

¹ The Gaelic word for water is *uisge*. *Whisky* is a corruption of *uisge-boy*, "yellow water."

England permanently; still, all the island had been covered with forts, united one with the other, straight as an arrow, by their, for the time, magnificent roads.

The Romans had built also some bridges, but that streams were generally unbridged "nothing shows more conclusively than the fact that where the great lines of Roman road are intersected by rivers, we so frequently find important towns bearing the Saxon suffix *ford*. At Oxford, Hereford, Hertford, Bedford, Stratford on-Avon, Stafford, Wallingford, Guilford, and Chelmsford, considerable streams had to be forded. In the kingdom of Essex, within twenty miles of London, we find the names Old Ford, Stratford, Ilford, Romford, Woodford, Stapleford, Passingford, Stanford, Chingford and Stortford."

"The Wall of Hadrian, or of Severus, as it is called, ran from New Castle to Carlisle, and is still in wonderful preservation. But even if the massive masonry and huge earthen rampart of this wall had perished, it would be easy to trace its direction by means of the continuous series of memorial names which are furnished

by the villages and farm-houses along its course. It began at *Wallsend*, now famous as the place where the best New Castle coals are shipped. We then come in succession to places called *Benwell*, *Walbottle*, *Heddon-on-the-Wall*, *Weldon*, *Wallhouses*, *Wall*, *Walwick* Chesters, *Wallshiels*, *Walltown*, *Thirlwall*, *Birdoswald*, *Wallbours*, *Walton*, *Oldwall*, *Wallknoll*, *Wallmill*, and *Wallby*, with *Wallend*, *Wallfoot*, and *Wallhead* at the western end.

Cester, *caster*, Celtic *Cær*, are modifications of Latin *castra*, castle; and generally recall the name of some Latin fort: *Rochester*, *Porchester*, *Chesterton*, *Tadcaster*, *Brancaster*, *Ancaster*, *Lancaster*, *Caerleon*, *Caerwis*, *Caerven*, etc., etc."

Of historical events recorded, stereotyped, so to speak, in local names, all Europe is full. "Probably the greatest reverse ever suffered by the Roman arms was the defeat which Hannibal inflicted on Flaminius at *Thrasymene*. The brook which flows through this scene of slaughter is still called the '*Sanguinetto*' ('blood' in Italian is '*sangue*'), and the name of the neighboring valley of

‘Ossaia’ (‘ossa,’ bones) shows that the plain must have long been whitened by the bones of the fallen Romans.”

Now should any body ask whether any practical result may come out of this branch of the science of language, we can surely answer: yes! one, at least, and very great. This etymological ethnology helps the historian to penetrate into the darkness of those ages, when the nations, whose descendants now people Europe and America, were not firmly settled anywhere, but were, so to speak, in a state of wild suspense, warring against one another, forcing, and forced in their turn away from their abodes to new regions and new climes. By these investigations, which the science of language has made possible and fruitful, we see, for instance, that “Franks, Saxons, Angles, Sueves, Lombards and Burgundians, were united by a much closer connection—ethnological, geographical and political—than historians have hitherto been willing to admit;”—we see that the pretended differences of race between the present European nations are mostly the offspring of national conceit, prejudices, and chauvinism.

England, the country of the Anglo-Saxons, teems with Celtic, Scandinavian, and Latin blood ; whilst Anglo-Saxon, Normand, Celtic and Teutonic blood flows in no small quantity in the veins of the modern French. In Italy herself, at the very core of the Latin race, we find streams of Teutonic and Celtic blood, which in some parts even exceeds by far the blood inherited from Latin forefathers. The divisions of nationalities, as they are now commonly understood, which foster the international antagonism of Europe, and weigh down the people with blind wars and ruinous standing armies, by these etymological researches are once more shown to be false and artificial not less than inhuman.

Thus, even from the remotest quarters, science comes to the help of progressive humanity, and, by the light of these investigations, which at first may seem useless and more like learned trifling than earnest and worthy research, those very names of nationalities—like English, French, Germans—which thus far have been pitted one against the other as standards of hatred, are made to testify to the

common descent and brotherhood of those who bear them. In truth, nothing helps more to destroy prejudices than to inquire into their origin. Prejudices are not checked either by hatred or contempt; amidst persecutions they wax stronger: blood seems to foster them. But they can not stand the light of history.

A kindred and very interesting subject of study are the surnames. As tribes and peoples grow, individual names are no longer sufficient. Other names are to be resorted to, and they are found sometimes in personal qualities, more often in names which mark the family, or the clan, or both, to which the individual belongs. The number of such names, their nature and meaning, vary from people to people, and their systematic study affords a good deal of interesting information for the historian and the ethnologist, as well as for the linguist. Even people most superficial in their culture have not failed to notice that the way of naming a person in the Old Testament is quite different from the Roman way, and both differ from the Greek surnames. Every people has worked out for

itself a system of surnames in harmony with its own nature and institutions.

But we must confine our researches to English surnames, and here, too, we must be satisfied with the most elementary observations. Those who would like to know more about this matter may consult C. W. Bardsley's "Our English Surnames," to which I am largely indebted for the remarks that follow.

The origin of most English surnames is to be found either: 1st, in baptismal or patronymic names; 2d, in local names; 3d, in trades and occupations; or 4th, in nick-names.

In the first place, it is useful to remember that *kin*, *cock*, *ot* or *ott*, *et* or *ett* were suffixes used to form diminutives. *Kin* is the Saxon *kin*, and means "child, offspring"; *ot*, *et* are of Norman origin; *cock* we have still in "cock-robins," "cock-boats," cock-horses."

As instances of surnames of the first category—from personal or patronymic names—we may quote: from Simon, Simcox, Simpkins; from William, Wilkins, Wilcox, Willot, Willett; from Mary, Marriott; from Elias, Elliott; from Emma, Emmett, Emmott. Other names

have become surnames without any change: John, Richard, Robert, Henry, Thomas, Ralph, Geoffrey, Jordan, Stephen, Martin, Benedict, Lawrence, Reginald, Gilbert, Roger, Walter, Baldwin, Francis, Maurice.

Theobald was reduced to Tibbald, Tibbe and Tebbe, and from it we have the following surnames: Theobald, Tibbald, Tibble, Tipple, Tibbes, Tebbes, Tipkins, Tippins, Tipson, Tibbats, Tibbets, Tibbits, Tebbatts, Tebbotts, Tebbutts.

We must not wonder at this fecundity of forms. In Italian there are more than three hundred surnames derived from the name of Domenico (Dominic).

From *Gilbert* we have Gibbs, Gibbins, Gibbons, Gibson, Gibbonson and Gipps.

From *Elias* we have Ellis, Elys, Elice, Ellice, Elyas, Helyas, Eliot or Elliott, Ellsons, Elkins, Elkinsons, Elcocks, Elliotsons.

Peter gives us the shorter forms: Parr, Peirs, Pierce, Pears, Pearse, Peers. Hence Parsons, Pearsons, Piersons, Peterson, and the pet forms—Perretts, Parrots, Parretts, Peterkins, Perkins, Parkins, Parkinson, Perks and Perkes.

From the feminine Petronilla we have Pernel, Pernell or Parnell; from Magdalen, Maudlins, Maudsley. *Tiffany* is only a popular form for Theophania. From Margaret—the Norman-French Margot, Marjorie, Maggots, Maggotson, Margots, Margets, Margetson, Margison, Margerison, Meggs, Maggs, Megson.

Matthew gives Matthews and Mathewsons, Matinsons, Matsons and Matts.

From Bartholomew: Bartle, Bartlett, Batte, Batty, Bates, Batsons, Batcocks, Badcocks, Batkins and Bodkins.

To Thomas are to be referred: Thomasons, Thomsons, Thompsons, Thomasetts, Thomssetts, Tompsetts, Thompkins, Tompkins, Tomkins, Tomkinsons, Thomlins, Tomlins, Tomlinsons, Thomms, Thoms and Toms.

Not less numerous, perhaps, are the surnames derived from names of office and trade. *Sergeant* is the origin of Sargeants, Sargants, Sargeaunts, Sargents, Sergents, Sergeants, Sarjants, Sarjeants.

Beadell, Beadle, Beaddal, Biddle are to be referred to *beadle*, the man who executed processes or attended to proclamations.

Names of office we have also in Priest, Priestmann, Deken, Deakin, (Deacon), Chaplains, Chaplin, Abbot, Prior or Pryor, Canon or Cannon, Moyne or Munn (Monk), Cook, Butler, for which we have the forms Botiller, Botillers, Botelers, Botellers, Butillers, Butellier.

Spearman, Pikeman, Furbisher, Frobisher, Furber, Sworders, Sheathers, and Spurriers, remind us of warlike times and professions. The surname *Kisser* is more warlike and bloodthirsty than it seems at first sight. *Kisser* was the manufacturer of "cuishes" or "thigh armor" (French "*cuisse*," thigh).

In Forester or Forster or Foster, Parker, Parkman, Woodward, we have a record of the extensive woods of old, and of men devoted to their care; while Woodreefs, Woodrows, Woodroff, and Woodruff are but corrupted forms of "wood-reeve."

When the roofs of houses were composed of thack, or thatch, every village had its "thatcher." Hence the surnames of Thatcher, Thacker, Thackery, and Thackeray.

As for the surname Smith, suffice it to say, on Mr. Bardsley's authority, that in England,

between and including the years 1838 and 1854, were registered as born, or married, or dead, not less than 286,307 Smiths.

Not a few surnames are due to personal nicknames, as Strong, Long, Short, Bigg, Little, Large, Small, Thick, Thin, Slight, Round, Lean and Fatt, Megre and Stout, Ould and Young, Light and Heavy. Many times, beside the Anglo-Saxon, we have the Norman nickname, as Large and Gros or Gross, Big or Bigg or Bigge and Graunt or Grant or Grand, Small and Pettit, Pettye, Petty or Peat; Lowe and Bas or Bass, Short and Curt, Fatte and Gras or Grass, Strong and Fort, Ould and Viele, Young, Younge and Jeune.

To the different complexions or the color of the hair we owe such surnames as White, Black, Roux, Russell, Brown, Hore and Houre, Grey and Grissel, Blanc, Blund, Blunt, Whitelock or Whitlock, Silverlock, Blacklock.—Reeds, Reids, Reads are all forms of the old *rede*, red.

Nicknames or personal qualities we have in Goode, Patient, Best, Perfect, Wise, Sage, Merry, Gay, Blythe, Joice, Friend, Goodhart, Truman, True, Leal, Kind, Curtis or Curteis,

Fulhardy, Wilfulle, Hardy, Grave, Gentle, Sweet, Meek, Goodfellow, and Longfellow.

Apropos of Longfellow, I transcribe here, merely for a diversion, a rhythmical pleasantry, recorded in the "Book of Days" (Chambers, quoted by Mr. Bardsley). "Thomas Longfellow, landlord of the Golden Lion Inn, at Brecon, must have pulled a rather *long* face when he observed the following lines written on the mantelshelf of his coffee-room :

' Tom Longfellow's name is most justly his due,
Long his neck, long his bill, which is *very* long too ;
Long the time ere your horse to the stable is led ;
Long before he's rubbed down, and much longer till fed ;
Long indeed may you sit in a comfortless room,
Till from kitchen long dirty your dinner shall come ;
Long the oft told tale that your host will relate,
Long his face while complaining how long people eat ;
Long may Longfellow long ere he see me again —
Long 't will be ere I long for Tom Longfellow's Inn.' "

Not a few nicknames are taken from the animal kingdom, as Jay, Peacock, Rook, Pye, Pyett, Lark, Finch, Goldfinch, Cuckoo, Cock, Cockerell, Sparrow, Pidgeon, Dove, Swans, Stork, Crane, Heron, Duck, Duckerell, Drake,

Wildgoose, Greygoose, Gander, Woodcock, Partrick, Pheasant or Feasant, Blackbird, etc.

But the most interesting for our studies are the surnames derived from local names. The name of the place where a man lived and whence his family derived its name is indicated in many ways. For instance, in connection with the name—*brook* (old form *broke*) we find,

Alice de la Broke,

Andreas ate or atte (at the) Broke,

Peter ad le Broke,

Matilda ad Broke,

Reginald del Broke,

Richard apud (Latin "near") Broke,

Sarra de Broke,

Reginald bihunde Broke,

where we have admixtures of Latin, Norman and English prefixes. These prefixes play a rather important part in the formation of surnames.

From At-the-Well we have the surname Wells, and also Attwell, or Atwell. From Atte-Wood we have Wood, Atwood, and Attwood. From Atte-Lea—"at the pasture," we have Lees, Leighs, Leghs, Atlays, Attlees.

From Atte-Borough, Attenborough, and Atterbury. Atte-Ridge has given Attridge; Atte-Field, Attfield. From Atte-Town, Atte-Hill, Atte-Tree, Atte-Cliffe, we have Atton, Athill, Attree, Atcliffes. The prefix sometimes is simply *a*: Thomas a Becket, is Thomas atte Becket, that is to say, "at the streamlet."

Before a vowel, instead of *atte*, we find not seldom *atten*. Atten-Oaks, for At-the-oaks, has given Noakes and Nokes. Atten-ash has given Nash; Nelmes is for Ätten-Elms; Oven, and Orchard in the olden registers are found as Atte-novene, and Atte-norchard.

The same local qualifications give us Bridger, and Bridgman, living near the bridge; Brooker and Brookman, Becker and Beckman, by the brook, by the streamlet; Weller or Wellman, by the well; while from particular trees we have Beecher, (once written Le Beechar), Asher, Oker, and so on.

The word *den* we find in many surnames, as Wolfenden, Foxden, Ramsden, Harden (hare), Buckden, Horsden, Oxenden, Cowden, Borden, Sowden, Swinden, Eversden, Ogden, written once "de Hogdene."

A fissure between hills is' recorded by such names as Clives, Clifles, Cleves, Clifford, Cleveland, Tunncliffe, Sutcliffe, Nethercliffe, Topcliff, Ratcliffe, Redcliffe, etc. From *combe*, "a cup-shaped depression," of the higher hillsides, we have Broadcombe, Newcombe, Morcombe, Lipscombe, Woolcombe, Whitecombe, Slocombe.

A provincialism for *gate* was *yate*, from which we have "Yates," written once "atte-Yate"; Bygate or Byatt; Woodgate or Woodyat.

House we have in "del Hellus," written once Hill-house. Woodus is the old "de la Wode-house"; Stannus is "Stane-house" or "Stone-house"; Malthus is "Malt-house." The original form of the surname Bacchus is "del Bake-house."

Croft, an inclosed field, has given Croft, Meadowcroft, Ryecroft, Haycroft (that is hedged-croft; *hay* means a hedge, as we have seen); Bancroft, from bean-croft.

The *lee* offered a shelter for all domestic live-stock, and is represented, mainly under the form *ley*, in many surnames: Horsley,

Cowley, Kinley, Oxley or Oxlee, Buckley, Hindley, Harley (hare); and from the names of the trees which inclosed or covered the lee, we have Ashley, Elmsley, Oakley, Lindley, Berkeley.

We should never come to an end had we to go through all the English surnames derived from local names. There is an old couplet:

In "ford," in "ham," in "ley," in "ton,"

The most of English surnames run ;

and, as we have seen elsewhere, all these endings, "ford," "ham," "ley," "ton," are but words to denote places.

These brief and fragmentary mentions are not guilty of any pretense of being a review of English local and family names. But they are sufficient, I hope, to show that in this field, too, for every name there is a reason, which most often we are able to find out ; and in so doing, the science of language, while it accumulates useful materials for itself, brings out no little light for the historian and the ethnologist.

Sometimes particular customs, events, or prejudices, local oddities or genealogical anecdotes, which otherwise would be lost forever,

are unearthed by the linguist by means of a local or family name. Viewed in this light, it is true, then, as Mr. Bardsley says, that "the country churchyard, with each mossy stone, is a living page of history, and even the parish register, instead of being a mere record of dry and uninteresting facts, becomes instinct with the lives and surroundings of our forefathers."

IX.

LANGUAGE AND EDUCATION.

THE study of language is so great a part of our education that it is but natural to expect that a science whose object is language, must have some bearing on education. In fact, education begins to feel the influence of the great results attained by the science of language. It merely begins, since the science of language is very young, and its method and achievements are not yet sufficiently known even among those who are most concerned with education.

But every day that passes, witnesses the importance of this science increased and its influence widened; and it is safe to say that the first half of the next century will see great changes wrought in the programme and method of public education. In the first place the great achievement, which we owe to the science of language, is the discovery of laws governing the life of speech. This apparently bewildering

ing growth of words and this complicated crossing and recrossing of sounds obey certain laws as well as all that lives in the realm of nature. This fact is easy to enunciate, but it requires a good deal of reflection to grasp its whole bearing. It upsets all the ideas about language that still are almost commonly entertained even by educated people, who have had no particular philological training. It lays open before us an entirely new world ; a world of sounds intimately connected with thoughts ; a world of music, more powerful than all the music we know, and obedient to particular laws, just as music is ruled by harmonic laws ; a world in which all the powers of man, his mind, his bodily organs, his reason, his perceptions, his sense of art, his taste, meet and work together. To know and prove that such a world is ruled by laws, and that we can acquire a knowledge of these laws, is indeed a great achievement, whose importance will be felt every day more and more in all departments of human culture. That a knowledge of such laws is of practical utility in acquiring languages, is not to be doubted. He who undertakes to study French, Italian

and Spanish, and meets the words *faire* in French, *fare* in Italian, and *hacer* in Spanish ; or *lait* in French, *latte* in Italian, *leche* in Spanish, or again, *fait* in French, *fatto* in Italian, *hecho* in Spanish, what can he do but learn materially and mechanically all these words by heart? But if he has had any training in the science of language, if he knows some of the rules according to which the Latin word passes into the Neo-Latin languages, he will see at once that the words above quoted are, respectively, mere varieties of the Latin words *facere*, to do ; *lacte* milk ; *factum*, done. He will thus have a rational knowledge of the language he is studying ; his reason comes to help his memory ; his study becomes more interesting and more profitable at once.

He who studies a language without caring to know where it comes from, and what are the laws that rule the formation of its words, pursues a very material task which appeals a good deal to his memory and very little to his intelligence, and he is robbed of nine-tenths of the interest which is to be found in the study of languages.

I well remember the first time I ever saw a game of cricket. The rules of the game were perfect Chinese to me. I saw a party of young men, fine fellows most of them, throwing or pitching a ball, and running to and fro as quickly as they could. Of course I could not help enjoying the sight, the clever throwing and catching the balls, the elegant costumes and attitudes of the young athletes; still I was puzzled rather than amused when I heard the public applaud enthusiastically every now and then, and I did not know why; when I saw the bowlers change their positions, or run and yell; or when I saw a player going off the field and another coming in, without my having a clue as to why they did so, and who were the conquerors, or who the beaten.

At last a gentleman undertook kindly to explain to me the laws of the game. Then I saw into it; I understood the reason of every movement; I could appreciate better the skill of the players, and my interest therein increased a thousand fold.

It is very much the same thing with the study of languages. He who studies them ma-

terially, as is now generally done, can not help but wonder at the mysterious play of words and sounds which is going on before him, and all he can do is to try to catch as much of it as he can, almost by sheer dint of memory. He who brings to the study of languages a good philological training, sees into the nature of the matter. He notices the working of laws, and follows them with interest and pleasure. Each law is like a thread that guides him through the labyrinth of language. Every word for him is not an isolated fact, but a link of a great chain, or, if you like, a little twig of a great tree, of which he comprehends at a glance the full growth—the roots, the trunk, the branches, the fruits.

He who knows only English and undertakes the study of French, will grind at it for months and months, in many cases without satisfactory results. He who has studied some Latin, and has had some training in scientific grammar, will master the French forms, especially the formation of words and the grammatical inflections, in a very short time, and in such a way as to have of them not merely a material, but a rational and historical knowledge. As for

fluency of speech, of course, it can only be attained by practice ; but every body knows what a great help it is to this end to be well grounded in the grammatical forms.

Besides this practical advantage, still greater is the importance of the science of language for the general training of the mind. It is a universal complaint that the study of languages develops almost exclusively memory, at the expense of our other mental faculties. Therefore there is a general cry for more scientific education. This is perfectly right when we consider the way in which the study of languages is now pursued ; millions of boys and girls are mercilessly crammed with tenses, moods and cases, which are dead letter to them. The boy whose mind is forever prone to ask *why ? why ?* at every thing he comes across, is obliged to sit still for years and years, and swallow paradigms and conjugations without ever being allowed to ask the *why* of what he studies, and whence those forms come ; so that at last he takes it as a matter of course, that for such things there is no *why* ; they are so simply because they are so. He sees that in

order to please his teachers and receive an attestation of merit, he must know so many cases and so many tenses by heart ; and so he sits down and learns them by heart. That is all : his teachers are satisfied, his parents delighted ; some of his companions, who are a little lazier or more independent, or, even better endowed with brains than he is, have not such a good memory, seem to envy him : what else can he desire ? He acquiesces by and by in the universal supineness ; that natural, almost irrepressible, tendency to ask *why*, is checked, and when he has learned some dozens of cases and tenses he is convinced that he knows of grammar about all that there is to know.

Still it is impossible that human nature, which delights in reasoning more than in memorizing, should be satisfied with such kind of knowledge ; and we can easily understand why so many, who in after life proved to be very great men, when they were boys, either disliked grammar profoundly, or showed themselves very backward in learning it.

The science of language will make a great change in all this : the study of language will

become very soon a matter of reasoning rather than of memory.—Once boys and girls were taught nothing about the laws which rule our bodily organism. Now they learn the processes by which food is transformed into blood ; the composition of our bodies, the forming and perishing of our tissues ; the development of our muscles, the function of our nerves, the structure of our eyes and ears and lungs, and the principal laws which govern our physical life. In the same way they will learn that there are laws which govern the life of our language ; they will be taught how words are built, where such and such a word comes from, and how it came to assume its present form. Of course, at first it will be a matter of no little difficulty to adapt such teaching to the intelligence of young people. But this difficulty will be easily overcome by experience. It is not much more difficult to adapt to the capacity of a boy the fundamental laws of language, than the fundamental laws of physiology. And that his mind will be interested in it, there is no room for doubt ; since he *must* learn a language, he will feel greatly relieved if you show

him *how* the things which he has to commit to memory came to be. I never happened to talk to a boy or a girl, a gentleman or a lady, about any linguistic fact, whether etymological, comparative or phonetic, without their taking real delight in the argument. It must indeed be no little pleasure to discover in the old well-worn words, which we use every moment almost unconsciously, facts and relations which open before us an entire world of historical information; which throw a flood of light upon the way in which we inherit the old words and form new ones; and the way in which we develop their meaning, bending it to the ever increasing and exacting wants of our mind.

Of course we shall have to change many of our ideas about grammar. As we have had occasion already to point out, the grammar which is now generally studied in our schools, is merely a copy, with some blunders added, of the grammar which was used in Rome about 2000 years ago. It is sad, but it is a fact. Many notions have to be given up, which comparative philology shows are entirely wrong;

many have to be modified, and many other elements introduced. Of course this will take a long time ; meanwhile, since the Greek grammar of George Curtius, and the Latin grammars of Schweitzer-Sidler, of Müller-Lattmann, and Robs, a great improvement has been attained in teaching the classical languages. As for the modern languages, the English grammar of Morris, the French grammars of Brachet, and Meissner, and Ayer, the German grammars of Scherer, of Vilmar, and Heyse, and the Neo-Latin grammars of Monaci and D'Ovidio, are the best specimens of grammars as modified by the results of the science of language.

As for English especially, to all those who wish to acquire a rational, superior knowledge of the language, we could never advocate strongly enough the study, at least elementary, of Anglo-Saxon and Latin. Those who will give to these two languages at least one or two years of good and serious study, will store away in their minds a precious treasure, which will never fail them; they will lay a foundation, on which all the knowledge they acquire in after years, will rest as a solid and substantial structure.

When the study of languages is carried on in this way, the chief objection, which rests on its appealing only to memory, falls of itself. Not that science should be excluded from education; far from that, there never was a time when a scientific training was so important as it is now-a-days. But it is to be remembered that in a standard education language will always have the first place, since there is nothing in the world that represents man so fully in his whole being as language. No other study develops all our faculties so thoroughly; only it is to be pursued with such a method as to call really into action all the forces of our mind.

The great advantage of the study of science is to accustom our minds to observe the existence of *laws* in the universe; to understand how such laws work, how they can be known by us; and that the only way in which we can master them, is by obeying them.

It is obvious that this logical habit of mind can be cultivated by the study of languages as well as by that of sciences, if only we pursue it according to the methods which comparative philology teaches us.

Besides our ideas about grammars, we have to change not a little also our ideas about dictionaries. The dictionary of a language is a record, a depository, of all the words that belong to that language. But every record of the kind has to be classified. Without classification it is difficult to find what we want among a small number of things; it is nearly impossible among a large number. Besides, classification ought to be such that when we know to what class, or family, or order, one thing belongs, we should, by this mere fact, know what are its essential qualities and characteristics, and how it is connected with, or separated from, other things of the same kind. It is then of the greatest importance which characteristics we assume as foundations for our classifications. Had we to classify books by their size, plants by their height, animals by the number of their extremities, our classifications would be of very little help, indeed, in bibliographical, botanical and zoological studies. We would find a treatise on metaphysics beside a book on nervous diseases; a poem of Homer near the file of a humoristic

paper ; potatoes near heliotropes ; serpents and fish, men and birds together. On the contrary, we know that books are classified in catalogues according to their subjects, and such catalogues are supplemented by the alphabetical list of the authors' names. Plants and animals are so accurately classified according to their most essential organs, that when we know to what class a plant or an animal belongs, we know almost all that science can tell us about that plant and that animal. Classification, properly understood, is the last result of science ; indeed science consists in classifying the universe.

Let us now turn to what happened with the classification of words in our dictionaries. The most important elements in a word are its *root* and its *meaning*. Do our dictionaries classify words according to either or both of such characteristics ? Not at all. They classify words according to their *first letter* ! Why not, for instance, according to the *second* letter ? or to the *last* letter ? It would be just as reasonable ; nay, there is a greater advantage in having words classified by their endings than by their beginnings. The beginning of a word may be

either a part of the root, or a prefix, or the beginning of another word, which helps to form a compound word; so that, really, from the beginning of a word we have no light whatever on its structure or composition. The ending, on the contrary, is generally a suffix with a certain meaning; and by seeing so many suffixes side by side, the student would, at least intuitively, if in no other way, learn the particular meaning of each suffix, and thus would at least have a clue to the formation of words. We have many instances of dictionaries of this kind; but they were compiled with another practical aim; namely, to help cheap poets to find their rhymes!

Still, so great is the force of habit, so unreflective are we when we deal with language, that I am sure many readers must have laughed when I said: "Why not make a dictionary according to the endings of words?"

And then, what is the order according to which we classify the beginnings of our words? It is the so-called alphabetical order. But this is no order at all. The order of our alphabet is simply a chaos. Vowels and consonants are

mixed up together without reason or discrimination. The present order of our letters has no more scientific value than if we put all of them into a box and take them out one by one, blindfolded. The Hindu grammarians were far ahead of us in this as in every thing that concerns grammar; their alphabet, besides being far more perfect than ours, is classified in a thoroughly scientific way. First we have the vowels; these, too, rationally classified. Then come the consonants, classified according to their physiological nature: gutturals, labials, dentals, etc.

But this does not matter much for our argument about dictionaries. What is important is that we must recognize the entire absence from our dictionaries of any thing worth the name of classification. Words which have nothing in common, either in their root or meaning, are registered beside one another simply because they happen to begin with the same letter. A classification of animals by the number of their extremities would be just as valuable as this. A good scientific classification of the materials of our language would help us immensely, be-

yond any thing we can imagine, in mastering easily and scientifically the whole language, as a rational classification helps us in the study of zoology and botany. Absence of classification, which would make it impossible to learn zoology or botany, is one of the reasons why our knowledge of languages, even of our own, is generally so scanty and poor.

We have seen that the most important characteristics of words are their roots and their meanings. We *must* resort to either of these elements in order to have a good classification of words. Attempts at classifying words according to their meaning or, as they are called, idealogical dictionaries, have been made every now and then. And very useful they are, withal ; but sometimes a word is used with different meanings, and the borders between one group and another of ideas are so difficult to trace, that some confusion is unavoidable.

On the other hand, *roots* are such a substantial and distinct element, and the knowledge of the value of a root, and of the most important affixes, leads us so clearly to the fundamental meaning of the word, that evidently a

classification of words according to their roots is at once easier and more advantageous. In this, too, we can learn a good deal from the Indians ; Sanskrit dictionaries start not from words, but from roots.

We must consider that hardly any language has more than five hundred roots as the origin of all its words. Now, had we all its words arranged under these five hundred and odd roots, how easy it would be to take every day half a dozen of those roots, or ten, or twelve, and learn them, and look carefully at their most important derivatives ! We could then in a few weeks go over all the material of the richest language in the world. We could see the links that connect words, apparently dissimilar, into so many clusters. We could see their fundamental meaning, and how it is modified by prefixes and suffixes. We could see how one group of words is allied with another. We could, then, read and study a dictionary systematically, just as we read or study a treatise on zoology or botany. Instead of a formless, unreasonable, hap-hazard agglomeration of words, we would have all of one language

reduced to a system. The story, or rather the life, of a root would lie before us, just as a map of a river ; we see its source, we see it growing on its way, as it winds through valleys, and plains ; we see it branch in two or three directions ; we see the rivulets and torrents that run into it.

The materials for such dictionaries are not yet ready in full, but they are coming in steadily and rapidly. The day is not far off when our dictionaries will be looked at as we look at the botanical classifications, or rather agglomerations, of two centuries ago. Lexicology awaits its Linnæus, and it will have him.

Now it remains for us to consider how language is to be represented. It is needless to sketch here the secular efforts by which the accumulated labor and genius of generations and generations, starting from the rudest attempts, came to represent words with letters, as all civilized peoples do. What is important to notice is, that whatever means we resort to, the signs we use must represent the words we utter, in a clear unmistakable way. Our signs must photograph our words. If any body,

looking at the sign, feels doubtful what kind of sound is represented thereby, that sign is imperfect ; it should be corrected. In plain words, our spelling must be the faithful picture of our speaking. This has been attained almost to perfection by such languages as Sanskrit, Greek, Latin, German, Italian, Spanish, Russian, and others. It is with an uncontrollable feeling of sadness and shame that one turns to the English system of spelling. English spelling is the greatest monument of stupidity that the history of languages shows us. The notion that words are not *letters*, but *sounds*, has been forgotten to such an extent by the English speaking people ; the confusion between the relations of sounds and their representatives in writing has been carried to such a point, that it would be ridiculous, were it not so harmful. We find poets who rhyme *by* with *beauty*, *was* and *pass*, *known* and *won*, *was* and *alas!* and other words which have nothing in common except a part of their spelling. This fact, apparently so unimportant, betrays the deepest ignorance of the nature of language, that it is possible to conceive.

I will not insist at length on this argument. All who know what language is, and what the function of spelling is, are fully aware of the gross inconvenience of English spelling. It is not only the greatest drawback to the spread of the English language, but also a very great encumbrance to the education of English speaking people. The reader may consult with profit an excellent article by Frederic D. Fernald in the "Popular Science Monthly" (Sept. '83), "How Spelling Damages the Mind"; and J. H. Gladstone's "The Spelling Reform"; Max Müller's "Spelling" (Fortnightly Review, April 1876); Whitney's "How shall we Spell?"

The question is urgent, and all thoughtful men should take a share in ventilating it and promoting its solution. Only this I will add: when we hear a foreigner make some curious mistake in pronunciation, instead of feeling like laughing, we should feel humiliated, because of our miserable spelling, which does not convey immediately and of itself alone the sound of the word.

Now, on reaching the end of our not long journey, which I wish had proved to my reader

at least half as interesting as it has been to me, let us cast a glance at language as a whole, as the official organ, so to speak, of a people.

When, through influences of races or migrations, or political and social revolutions, a language has been at last set down as the language of a people, how does its development go on? For instance, since the time when France was strongly organized into a state, and French became the language of literature, of science, of government, of commerce, and the means of intercourse between the generality of the French people, what forces have contributed to its development? Because French, not less than any other language, is developing still; is still losing and transforming old words and acquiring new ones every day.

Languages present to us the highest standard of organic constitution which any political body might be happy to approach. The highest pattern of a political constitution would be that by which *all* the forces of the people, of the rich as well as the poor, of the educated as well as the uneducated, of the individuals by themselves as well as of corporations, trades and

callings, are brought to work together, helping one another, and checking each other's too one-sided tendencies, for a final harmonizing of the whole work.

Languages show us exactly such kinds of typical constitutions. The educated, who have a better sense of the value of words and often know where they come from, have a natural tendency, in their speaking and writing, to be conservative, to preserve words in their time-honored forms, to renew old meanings and revive old words which have been lost. On the other hand, they bring also into language a very progressive element, inasmuch as their being in the van of science, philosophy, art, literature and government, makes it indispensable for them to coin new words, or to give old words new meanings, in order to designate the new ideas which they are the first to scout.

The uneducated, or half-educated, are also progressive in one respect, as on account of their imperfect knowledge of the structure of words, they are not well aware of the true value of each part of them; they are, therefore, very careless in handling them, and the wear and

tear which eats up or transforms words from generation to generation, is especially due to the dialectic transformations which they undergo at the hands of the least educated. On the other side, the uneducated are strongly conservative of familiar words and sayings, and very slow to adopt the new words which are introduced into the language by the progress of culture.

Meanwhile, together with those two main streams, numberless rivulets contribute to make up the great river of national speech. The scientist or the philosopher brings in a new word for a new idea, for a new phenomenon observed, for a new disease or a new experiment ; the poet a new epithet ; the sailor a new name for a kind of wave, or a new implement on his ship ; the traveler the name of a foreign plant, or animal, or custom, or dress ; the cowboy a new word concerning cattle-raising.

Thus every living force of the people tells on its language. Thus it is that language may be said to be the mirror of the life of a people. We can say more : language is the best record, as well as the highest reward, of a people's

labor. Look at what happens daily around us. A man who lives on the sea, knows so many things and has so many words about ships, waves, winds, and gales, that we land-lubbers listen to with astonishment. A lumberman has many words to indicate every kind of wood, their properties and qualities, that no scholar knows. A painter can see and name a large number of colors and nuances, whose existence the layman does not even suspect. In the same way, the more varied, the more lively, the more intense the activity of a people, the richer, the stronger, the higher its language—and the richer especially in those directions in which the activity of the people has particularly developed. No language is so rich as German in metaphysical and philological terms, because no people, in modern history at least, has given so much study to metaphysics and philology. Why Italian is so rich in musical and artistic terms, it is easy to understand. The sociableness of French people explains their genial wealth of conversational words and idioms.

If we turn now to the English language, we

have before us a spectacle so great, that I do not know where we can find a parallel. English speaking people are spread all over the world; there is no degree of latitude, no corner of the globe, but bears witness to the glory of this race. They are great in science, rich and inventive in literature, deep in poetry, active and successful in commerce, manly in war, giants at sea. In social and political organization they lead the world. Must we wonder then, that the English language has been developed in such a way that, taken as a whole, no language can stand comparison with it? No language combines to such a degree strength with simplicity, depth with perspicuousness, innate poetical vigor with practical efficacy.

We have had occasion to mention that the further we go back in the history of civilization, the greater we find the number of languages spoken. Civilization in its triumphal march unifies tribes into nations, and reduces the number of languages, sweeping out of existence those which are unfit for the struggle. If one day civilization should unite—and we fervidly hope it will—all or almost all the world into a

bond of peaceable brotherhood, one language will supersede all others, and become the recognized language of that brotherhood. No other of the living languages has as great chances of becoming that language as English. There is, it is true, a great drawback in its miserable spelling ; but this is an evil which can and will be corrected. English is the language of the future.

THE END.

